













Though this Effigies here does Represent  
 and Portray forth his faces Liniment  
 Yet Read his Booke, and you therein will finde  
 that he hath Pictur'd there a Soldiers minde.

G. Glouer  
 fecit.

# MILITARY DISCIPLINE:

OR THE  
YONG ARTILLERY MAN.

VVherein is Discoursed and Showne the  
*Postures* both of *Musket* and  
*Pike* the exactest way, &c.

Together with the Exercise of the Foot in their *Motions*,  
with much variety : As also diverse and severall *formes*  
for the *imbattelling* small or greater *Bodies*, demonstrated by  
the number of a single *Company*, with their *Reducements* :  
Very necessary for all such as are studious in  
the *Art Militarie*.

*Whereunto is also added the Beneficiall Vse of the Half-Pike  
joyned with the Musket. With the way to draw  
up the Swedish Brigade.*

---

The second Edition, Newly revised and much  
inlarged.

By *William Barriffe*, Lieutenant.

---

*Blessed be the Lord my strength. which teacheth my hands  
to warre, and my fingers to fight. Psal. 144. 1.*

---

LONDON,  
Printed by R. O. for RALPH MAB. 1639.



# MILITARY

OF THE

ARMY

AND NAVY

OF THE UNITED STATES

OF AMERICA

AND THE

ARMY AND NAVY

OF THE UNITED STATES

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OF THE UNITED STATES


OF AMERICA

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# TO THE RIGHT HONOURABLE, ALGERNON,

Earle of NORTHUMBERLAND,  
Lord of the *Honours of Cockermouth,*  
and *Petword*, Lord *Percie*, *Lucie*, *Poynings*,  
*Fitzpaine*, *Bryan*, and *Latimer*, Knight of the Noble  
Order of the *Garter*, Lord High Admirall of  
*England*, *Ireland*, and *Wales*, and of the *Domi-*  
*nions* and *Iles* of the same, of the Town of  
*Cales* and *Marches* of the same, of *Normandy*,  
*Gascoigne*, & *Aquitaine*, Lord Generall of  
the Navie & Seas of the said Kingdomes  
of *England* and *Ireland*: One of the Lords  
of His Majesties most Honourable Privy  
Councell: and Lord Lieutenant of  
*Northumberland*, *Cumberland*, and  
*Westmerland*.

Right Honourable,

 He Glorie of the *Meri-*  
*dian Sunne* is the more re-  
splendently set off by the  
*foile* and *darkenesse* of a *Shadow*;  
which is a perpetuall follower of his  
*light*; as my *ambition* in all humble



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THE EPISTLE

---

service is, to be unto Your Lordship. The memory of so many *Heroicall Ancestors* as (in all Ages) have ennobliz'd your *potent Family*; together with their *Martiall* and *Renowned Atchievements*; do for ever stand recorded in the *Booke of Honour and Fame*. And that (were occasion fairly offered) your *Honour* hath *Spirit* and *Bravery* enough, in a *Militarie emulation*, to arrive up to the height of their *glory*: your constant and noble *Departments* (as well in your *private carriage*, as of late daies in your *publike Triumph*, when you were installed into that most *Noble Order of the Garter*) doe most evidently *pre-sage* of you. This as it hath attracted all eyes and *expectations*: So hath it encouraged my *low ambition* (among the rest) to esteem your *Honour* a fit  
Patron

---

DEDICATORIE.

---

Patron for a *Booke* of this *Nature*.  
Your *innate* and *inbred* vertues, together with that *Courtesie*, *Noblenesse*, and *Affability*, (the inseparable *Companions* of *anciently descended Honor*) I speak you so easie of *accesse*, that my **YOUNG ARTILLERY-MAN** despaireth not of *acceptance* and *admission* to kisse the *hands* of your *Great Lordship*. The *first-fruits* it is, of my weak *endeavours*, and the *experiments* of my private *observations*. Such as it is, my humble request to your good *Lordship* is, that out of the accustomed *freedome* and *goodnesse* of your *nature*, you would be pleased to daigne *acceptance* of it : Even the *acceptance* also of this *second edition*, as you pleased to be of the *former*.  
Which as it may be an ample testimonie of the continuance of your  
A 4 Hono-



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THE EPISTLE

---

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Which as it may be an ample testimonie of the *continuance* of your

---

THE EPISTLE

---

*Honorable favours to the Authour. So this my second Dedication shall give assurance to the world of the continuance and redoubling of my former devotions and obligations, and how well I was pleased, that so great a Peere vouchsafed the Patronage of the former. And I withall beseech your Honour, to give pardon unto that presumption, which hath proceeded from devotion. I confesse it an ambition in me, to sore so loftily in my Dedication. But as Alexander (sometimes) refused not a mean Present of Fruit from the hands of a simple Gardiner: so my hope is, your Honour will hold mee excused for offering so worthlesse and meane a Mite to so great and Honourable a Personage. But considering that the subject of my Discourse is intended*  
for



---

DEDICATORIE.

---

for the *bettering of the Souldiers knowledge of the trained Bands*; and that your *Lordship* is one of His *Majesties Lieutenants*, it may prove a good *inducement* to your *Honours* liking (who are knowne to bee so great a *lover of your Countrey*) to *vouchsafe the protection and Patronage* of these my first *endeavours*, whereby I shall for ever stand *obliged* in all *humility*, and remaine,

Your Honours *most humble*

*and devoted Servant,*

WILLIAM BARRIFFE.





To the Right VVorshipfull, Sir  
RALPH BOSVILE, *Knight*:

Captaine of a Select Company of Foot in  
the County of *Kent*.

**Y**ou may be pleased to remember (Noble Sir) how often you have *importun'd* me to *write something* (by way of instruction) for the *bettering of the judgements of such young Gentlemen and Soldiers, whose minds stand this way affected*. And although (for my own part) I can better mannage the *Pike* than the *Pen*; yet that I might not bee wanting in all acknowledgement, I have taken upon mee to satisfie your request; which shall ever carry the *authority of a command with it*. Expect not (I beseech you Sir) to finde my *Booke* set forth with *fine phrases*, nor to be deckt with *historical discourses of forraigne fought Battails*; this being the onely thing by me intended in it, to set forth the *exact grounds of this our modern discipline*, for the exercising of a *foot Company*. Nor is it to be esteemed a *small advancement* to the knowledge of the *art Military*; even to have taught this *little*, seeing it must be confessed to have been one of the chiefest



fest meanes to make Philip from a poore Prince to become a powerfull Monarch; and his Sonne Alexander, a mighty Conquerer. I meane his exact observance of the true grounds of *Militarie Discipline*, which beginneth with the instruction of a private Company.

Adde hereunto (which I have also touch'd upon) his frequent practice, and inuring of his Souldiers to the use of *Armes*; together with his well ordering and contriving the severall formes and figures of his Battells. Alwaies (by the way) observing how to make his advantage, either from the time, the number, or the place, or some other such like opportunity. But not to cloy your quainter eares with impertinent discourses: who are not onely a Master of *Armes*, but of *Arts*; also a Gentleman that hath beene Captaine either over horse or foot, for the space of these last forty yeares: and from your very *infancie* brought up in the very bosome of the *Muses*. So that you are now become a Nestor for Counsell, an *Apollo* for Musick, and a *Mars* for the Field. But lest by acknowledging your worthy parts, (your native modesty being such, that you never love to heare your owne due deserved praises) I purchase a frown for a recompence: I forbear. My humble desire now is, that your worship will bee pleased to accept of my well meaning: and although I bee wanting in artfull expressions, yet to rest assured that I am yours in all humble and hearty affection, and shall still continue

Your, though unworthy yet  
obedient Lieutenant,

WILLIAM BARRIFF.



## To all worthy *Commanders*, and brave *Souldiers*.

**G**Allant brave *Sonnes* of *Mars*, you must not looke  
That here's ought worth your *reading* in this *Booke*.  
Since I intend not further for to goe,  
Than to the *Letters* of our *Christ-crosse-row*:  
To shew the *Vowells*, or to learn to *spell*  
In *Disciplines* high straines I will not mell.  
But if, perhaps, you have a mind to scan  
Or spie faults in the *Young Artillery-man*,  
I pray you for *your credits*, as *mine owne*,  
You'l pick e no fault, till you be sure 'tis one;  
And then (perhaps) when *Reason* taking place,  
*Opinion* must *retreit* with foule disgrace.  
Yet if you truly shall an *error* spie,  
Tell me my *fault*, I'l not in *error* die.  
Then *worthy followers* in great *Mars* his *traine*,  
That to peruse my *worthlesse worke* will daigne,  
Iudge but the best, and you perhaps shall see  
The next I write shall a *farre better* bee:  
In the meane time, this is the *best* I have,  
*Prove* and *approve*. And more I will not *crave*.

WILLIAM BARRIFF.



To Captaine *Walter Neale*, now  
Captaine of the *Artillery Garden*. And to  
all the rest of the *Worthy Captains, Lieute-*  
*nants, Ensignes, Serjeants, and other Gen-*  
*tlemen* of that noble *Society*: *W. B.* wish-  
eth all increase of *knowledge*, and  
*continuance of love & unity.*

**R**ight worthy *Souldiers* of th' *Artillery*,  
Me thinks I see some of you looke awry,  
Telling me *I have done our Garden wrong*,  
And that in *Souldier-ship* I am too yong:  
That the worst *Souldier* of three hundred men  
Should dare in *Discipline* to use his *Pen*,  
And he that th' other day scarce knew a *ranke*,  
To write a *Booke* should now be growne so *cranke*:  
But spare your *anger*, for this *Booke* you see  
Can neither bring *reproch* to you nor *me*:  
If for *mean matter* I shall be detected,  
From a young *souldier* much is not expected:  
If any say I have done pretty well,  
They needs must think, should you write 'twould excell:  
Like *lads at wasters* I but lead the way,  
That better *Gamesters* may come into play.  
Therefore be pleas'd: if any fault be found,  
No shame at all can unto you redound.  
If ought be good, it h' *Garden* was me showne;  
If ought be ill, the *errour* is mine owne.  
Then as I from amongst you learnt my skill,  
So grant me love, your favour, and good will.

Yours ever, *Will. Barriffe.*





TO THE WORTHY  
CAPTAINES,

Captaine EDWARD DICHFIELD,  
&

Captaine HENRY SANDERS.

And to all the *Gentlemen* of the *private*  
and *loving* Society of Cripplegate  
Meeting: *W. B.* wisheth all health  
and long continuance.

*Right worthy Captaines,*



It is now something more than Ten  
yeare, since the *beginning* of that  
*private* and *commendable* exercise of  
*Armes* by your two *Companies* to-  
gether: how much experience it  
hath begot in your *Souldiers*, your  
selves bee the *Iudges*. This must bee confessed,  
that it is so *orderly* contrived, as to become no  
*hinderance* to mens more *necessary* callings. Yea it  
rather calls them the *earlier* unto it; for that the  
*exercise* continueth only *one* houre the *Thursday* of  
every week; and in the *Summer* time ending at se-  
ven of the *clocke* in the *morning*. Some there have  
been notwithstanding, that have held a *prejudicate*  
*opinion* of this meeting; conceiving that it would  
prove an *hinderance* to the *Artillery* ground. Never-  
thelesse

### The Epistle.

thelesse the prooffe hath reported the quite contrary: for that it hath become a great *meanes* towards the *advancement* thereof. And that by *send-  
ing* divers *Gentlemen* thither to enter themselves therein, who before had not the least conceit or purpose that way. As for the *Souldiers* of that meeting, they neither beate *Drumme*, display *Ensigne*, nor discharge *Musket*: But onely exercise their *Postures*, *Motions*, and formes of *Battell*, with false fire in their pans. which is the cause that the *Souldiers* having attained some little skill in the *handling* of their *Armes*, presently desire to exercise with more liberty, and so enter upon the *Artillery Garden*. Wherefore (most worthy *Captains*) you shall do well to cherish your diligent and industrious *Souldiers*, that so they may be heartened to persist in so honourable and commendable an *Entendment*. It being such an exercise, whereby God may gaine glory, the *King* and *Kingdome*, honour; your selves, credit; and your *Souldiers*, skill: For my owne part, I professe and acknowledge my self to be the first beginner of it, and doe still continue a member of the same. And this maketh me the more silent, though still I wish in heart the continuance of so friendly a society. And therefore (fellow *Souldiers*) I pray you accept of my good will for the deed: for were I as able as I am willing, I then, with the Poet,

*Would consecrate your Memories to time,  
That yours might live when I am turn'd to slime.*

Yours in all service,

WILLIAM BARRIFF.



TO ALL  
THE VVORTHY  
CAPTAINES OF  
THE CITY:

Especially, unto those that continue  
*Members of the Artillery-Garden.*

*Captaine Nicholas Crisp, Esquire ; One of His  
Majesties Farmers of the Custome-house.*

Captaine	{	<i>Martin Bond.</i>	{	<i>Samuel Carleton.</i>
		<i>George Wawker.</i>		<i>Tobias Maffy.</i>
		<i>Marmaduke Rawdon.</i>		<i>Randolph Manwaring</i>
		<i>George Langham.</i>		<i>Henry Sanders.</i>
		<i>John Venn.</i>		<i>Nicholas Beale.</i>
		<i>Edward Dutchfield.</i>		<i>Lewis Roberts.</i>
		<i>Thomas Covell.</i>		<i>Robert Davies.</i>
		<i>George Smith.</i>		<i>Mathew Forster.</i>
		<i>Edmund Forster.</i>		<i>John Bradley.</i>
		<i>William Geere.</i>		<i>Rowland Wilson.</i>

Right worthy *Captaines,*

**A**lthough it is commonly found, that  
every man by a kind of affection, loves  
to magnifie, and most to extoll those things,  
where-



whereunto hee finds his *mind* most *naturally*  
*inclined*. Yet all such *partiality* and private  
affection layd apart, the *owe* to my *Countrey*  
gave the *first heat* unto this *Worke*. And the  
rather I was induced thereunto, because I held  
my selfe *obliged*; that my small *Rivolet* ought  
to make an acknowledgement, or retribution  
to the *Ocean*, whence my poore *Streams* were  
*first derived*. And therefore in the *first place*,  
to your selves; who as you are *selected*, and  
*chosen Captaines* over the *Trayned Bands* of  
this our *City*; so are you also the *choicest* *flow-*  
*ers* of our *Artillery-Garden*: unto whom I  
was first beholding for the *Rules* and *Rudi-*  
*ments* of my *Militarie Instruction*.

And therefore Right worthy *Captaines*, ac-  
cept of this my acknowledgement; neither  
suffer any misconstruction to passe upon it, or  
impute it otherwise than to my *gratitude*. For  
this second publishing of my worthless *Work*,  
I hope I shall thereby give none of you offence,  
by reason that I know it is your *earnest desire*  
that (if it might bee) all his *Majesties* *Soul-*  
*diers* and loving *Subjects* might be made per-  
fect, both in the *practick* and *theory*, and all  
other *necessary Requisites* pertinent to the *Art*  
*Military*.

This

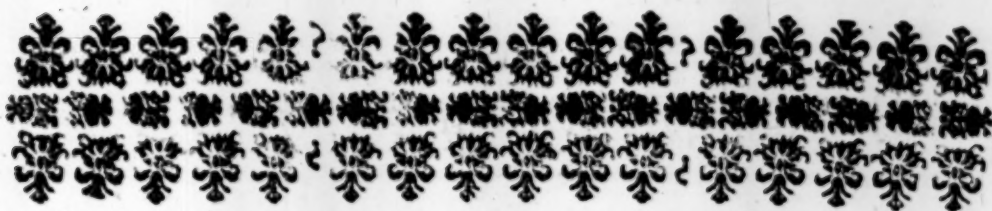
This is daily manifested unto us, by your frequent bearing of *Armes* on *Generall daies*; whereby you not onely give a powerfull and good example to others, waiving the sterility of the coldest affections; but like so many *Juds of Imbelliment*, you garnish and adorne the *lody of our Militia*. Persist then, worthy *Captaines*, in so brave an intendment, and immortalize your *Posterities*, by ingraving your *Names* in the *Booke of Honour*: who neither want *skill* nor *courage*, to merit with thole, whose *Legends* have filled the *Trumps of Fame*. But I have soared beyond the modest bounds of your *Departments*, for which I crave your pardons: by which you will further indeere

For Yours,

W. BARRIFF.







TO HIS  
MVCH HONORED  
CAPTAINE,

Captaine WILLIAM GEERE,  
*Esquire.*

Worthy Sir,

**H**AVING an opportunity by my Bookes  
second Impression, to present my ser-  
vice unto you, I could doe no lesse in  
acknowledgement of the great loves, the which  
you have expressed towards me, but render an  
account of my gratefull acceptance. And  
although I have nought else to present you  
with, I shall intreat you to accept of my best  
Endeavourrs, the which shall stand ever rea-  
dy prest at your devotion. And wherein I am  
tardy in Literall expression, I shall endeavour  
to make good by my diligence in person. As  
for your Company, I hold it a part of my duty

(as I am your Lieurenant) to instruct them one  
houre or two in a week, in their Postures, and  
well handling of their Armes; as also in the  
Distances, Motions, and firings: That so  
when His Majesty shall have occasion, and need  
shall require; they may be able to doe the duty  
of silent and obedient Sculdiers. The which  
I hope the next time you shall call them be-  
fore you, they will testifie; demonstrating by  
their readinesse, the promptitude of their  
abilities and good proficiencie. And this will  
thrive the better, if you bee pleased at some  
times of conueniencie, to cast your eyes of in-  
couragement upon them. The which will make  
every Souldier the more willingly endeavour,  
so to ingratiate himselfe the further into your  
favour.

This, as it will gaine perfection to your  
Company, so it will adde no disparity to your  
selfe. But rather render you the worthy Sien  
of so worthy a Tree. And as that honoured  
Knight your Father was a Captaine, and your  
selfe are one; so out of your numerous Issue  
there may spring many, to the further enno-  
belizing of your House and Family.

Thus farre have I presumed; withall desi-  
ring

ring, that if your many and waighty affaires  
can spare you a few minutes for the perusall of  
this my Worke, that then you would be pleased  
to accept of the integrity of my meaning. The  
which I have wholly fashioned to the benefit  
of the Reader, not setting it forth, deckt and  
imbellished with quaint speeches and curiosity  
of Language: But (to the contrary) endeavoured  
to my utmost to descend even to the meanest  
capacity, whereby the profit may redound to  
the good of my Countrey, the further propaga-  
ting and inabling of your Company, and the  
better settling (both) them (and others) in the  
Rules and Rudiments of the Art Militarie.  
Thus if you vouchsafe mee your favourable  
construction, and encourage me by your kindly  
acceptance, you will put a further obligation  
upon

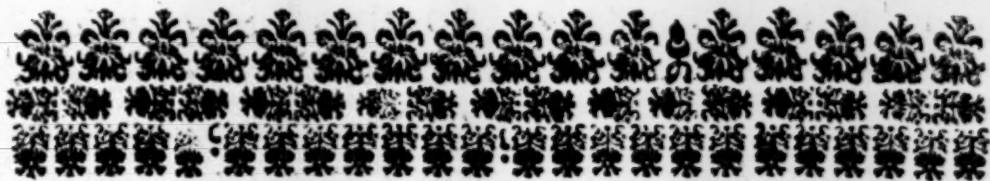
Your unworthy

Lieutenant,

W. BARRIFF.







## To the READER.



Ourteous Reader, although I have set forth this small *Treatise*, principally *ayming* at the *benefit* of my *Country*, yet I know that some will not be wanting, to *disparage* both the *workman* and the *work*, the *master* and the *manner*. For such is the *misery* of the *times*, and the *malice* of *men*; that the *frothy Depraver*, shall *found* (in some men) an opinion of his *worth*, by *detracting* and *undervaluing* other *mens merits*: For mine own part, I ingenuously confesse, that amongst many in our own *Ground*, I was the *meanest* both for *skill* and *schollership*, to have undertaken a *work* of this *nature*; but being continually *prest* by my *acquaintance*: some for the *Postures*, others for the *Motions*, and by some again for *Figures*, I being alwaies willing to further men this way affected; granted and gave to some men *Copies*, and suffered others to peruse my *Notes*, which I had placed in an old waste *Paper-book*. But at length, *time* and *mens tongues* together, had begot an *opinion*, that I had *writ a Book*. Which was so *freely divulged*, that I was requested by some, to know when it would *come forth* of the *Presse*, when as yet I had not the least *conceit*, to put pen to paper

a

tending

tending to this purpose. So that being engaged something in my credit, and withall requested by a right worthy Knight, my Captain, who had power to command: And lastly, being thrust on by the importunity of some of my familiar friends: I have put my Card amongst the rest into the bunch to be shuffled: not much caring where it be dealt, so it be not mixt with the ——— If any carp at the plainnesse of the stile, I conceive that it fits best with the subject: works of this nature, chiefly requiring it. If such, whom opinion hath made proud, and custome, captious, shall happen to be my Supervisors, to them I say, that it is easier to find faults, then mend them; and to mend Books, then to make them. But to the Courteous and skilfull, whose better parts will yeeld better fruits, I shall request their favourable censure, and that with their judgements, they will mend what by over-sight I have mist. For which their loves, I shall ever stand engaged: and remain

*Their thankfull friend and Servant,*

WILLIAM BARRIFF.

To





*Ad Amicum suum ingeniosum, GULIELMUM  
BARRIFF, Authorem.*

**Z** Oile venenatae jaculari cuspide Linguae  
Nil valet; hic veniunt *Pallas & Arma* simul.  
O quam securus Liber hic, qui *Martis, & Artis*  
*Palladiae* sacro Numine tutus erit!

Another by the Same.

**A** Souldier? and a Scholler? who did see  
*MARS and MINERVA both in one agree?*  
*Why come and see, for here is one hath spent*  
*His time in Mars 'is, and the Muses Tent;*  
*Both Say and Doe, how few can? but here (loe)*  
*He that doth Say so much, can much more Doe*  
*By's Practise, and his Precepts thou maist see,*  
*And learn to Know and Doe as much as He.*  
*What others get with pains, cost, hazard, harms,*  
*Here may be learn'd with ease; The use of Armes.*  
*Z O I L U S may catch and carp, now here, now there,*  
*But thou 'art beyond his Tongue-shot, never feare,*  
*Thou that dost dread nor Pikes, nor Guns, nor Swords,*  
*Dread not the blasts of Barking M O M U S words.*  
*Go on my Friend, and let there spring from our*  
*Artillery Garden many such a Flower.*

Captain SAMUEL CARLETON.

To my loving Friend, the Author.

**H**omer eterniz'd is for writing what  
Achilles and his Myrmidons did at  
The Siege of Troy. I envie not his fame,  
But needs must future Ages greatly blame,  
If they forget to memorise thee too,  
That show'it not what was done, but how to do.

Another of the same.

**T**His second time <sup>us</sup> ~~old~~ Barriff treads the Stage  
Of Mars: wherein he merits equipage  
With any He, that Characteriz'd with Pen  
The neat'st contrivements to Imbattell men.  
Woe's me, or him, or thrt State that shall misse  
A Brother, Friend, a Man of warre like this.  
This Gard'ner thats adorned with more flowres  
Of Discipline, than is the Yeare with houres.

Rowland Guyn.

---

To his much esteemed Friend and Fellow-  
Souldier, the Author.

**C**riticke, observe thy distance, censure not,  
Nor spend thy judgement like an Ideot  
That nothing knowes; If knowing, know thou then,  
Thou must be rank't amongst the envious men.  
If once thou dost attempt to contradict  
The matter that this Book contains in it:

The

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*The Method's plain; not dockt with complements,  
Those frivolous, idle, needlesse supplements.  
The substance ponderous is; no fond conceit  
Affronts thee friend. With shame they shall retireit ;  
And so retireit, as not to charge again  
In Front, in Reere, or Flanks. Thou shalt disdain  
All Formalists, that faine would Souldiers seem ;  
Whom much expressive are, in judgement green.*

Andrew Wheatley,  
*Ex Hospitio Gray.*

---

In Amicum Willielmum Barrieff.

**Y**oung, and so old in Martiall Discipline ?  
Distrust will say, This work is none of thine.  
But I that know it, will averre the same  
To be thine own, and not anothers fame.  
A noble Souldier scorns to be so base  
By others Worth to purchase his own Grace.  
And such is BARRIEFF. What his Book doth speak,  
It is his own: let Envie swell and break.

Amicus H. P.

---

To his Friend the *Author*.

**T**He Art Military (how e're suppos'd)  
Is hard like other Arts, yet here disclos'd  
In such a manner, that who e're he be  
That hath in it but learn'd his A B C.  
Without difficulty, with little pain,  
Such knowledge in this noblest Art may gain:



That he may say, and do as much as some,  
 That for this Art, have travel'd Christendome.  
 All by the learned help of BARRIFFS skill,  
 Learned I say, say others what they will.  
 But if they speak 'gainst this he hath put forth,  
 They will betray in them there's no such worth:  
 For this in him there is no fault at all:  
 Except in this, to teach this Art to all.  
 Persist then noble Friend, to th' world descry  
 What worth lyes hid in our Artillery.  
 And we that long to learn this Art shall say,  
 Thanks be to BARRIFF, he hath shown the way.

Rich. Clement.

---

On his much esteemed Friend,  
the Author.

**A**S London, Englands farre fam'd Emporie,  
 In her brave Garden of Artillerie,  
 With Reason glory may: because therein  
 Is exercis'd exacter Discipline,  
 By motions and apt firings; than is done  
 In any other Place of Christendome:  
 So may that Garden as deservedly,  
 (Accomplisht BARRIFF) joy and boast in thee:  
 Who stil'st thy self The young Artillery-Man,  
 Of thy abounding modelty. Yet can  
 Thy known experience thereby vailed be  
 No more than Sun-beames by a Tyffanie:  
 Why young? Is't cause thou'l't still a Learner be?  
 'Euen so must all that ayme at Excellencie.

New

New Accidents, and expert mens direction,  
Brings th'art of Warre still nearer to perfection.  
'Tis said, great Alexander wept, for that  
He no more worlds could find to subjugate.  
And yet if he before Ostend had been,  
He might have easier wept, than gotten in.  
Thy practick part of Drilling, I approve,  
As meriting thy Countries thanks and love.  
The rather, that I oft have seen thee doe  
A Captains Office, and a souldiers too.  
VVith such exact Dexterity, as none  
Could say thou cam'st short in perfection,  
To forraine Discipliners (*neere or farre*)  
Though daily train'd up in the Schoole of Warre.  
Yet as in thy assumed Title: so  
Th'art modest in thy faire expressions too.  
For thou adorn'st not thy Books Frontispiece  
VVith glorious Titles, to endere its Price.  
As Th'art of Warre; or Souldiers Academy.  
But thee confin'st within a Company,  
Or Squadrons exercise. And yet a way  
To set a greater Body in Array;  
Thereby discover'st. Onwards then, and stead  
Thy Nation for supplying at her need.  
Thy Country with large Troupes well-disciplin'd,  
For which, occasion will hereafter finde,  
A meane to crown thy merit, whilst thy friends  
VVish thy Designes, acquire their hop'd for ends:

Ja. Hayward, ex Hospitio Graiensis.

An

An Acrostick on his loving Friend and  
Brother Lieutenant.

Anagramma. { WILLIAM BARRYFF.  
I fill fame by Warr.

I f Lilly, Camden, and Learnd Vdall's name  
F inds memory still, and fills the trumpe of fame  
I n framing Rules for Youth that might them teach  
L earn'd Arts in tongues above the common reach:  
L et not Warres rudiments that here are brought  
F or Englands good; by none be set at nought  
A nd scorn'd: for they in time will make renown'd  
M en studious in this Art: and their acts crown'd  
E ndure: He that in Warre will seek to gain,  
B e perfect must in all, and that retain.  
Y oung though our BARRIFF be, yet this his Book,  
W ill speak him old, if well thereon you look,  
A ll Postures for the Musket, and the Pike  
R eformed are by him, and eke the like  
R esin'd in Motions all, they there do stand  
W ith forms and firings framed to your hand.  
I n Band; or in a Regimentall way:  
L ook here, and soon a Figure form you may.  
L ove to his Countrey, and our Gardens fame,  
I n time prevail'd with him, to let This same  
A gain to Praise be brought; O let not then  
M ad rage, rash censure of proud Ignorant men  
B e prevalent: but let the learn'd, the just,  
A nd eke the noble: yea all those that must  
R enowned be, and will gain fame by Warre,  
R egard what's good, forbeare harsh doom: then farre  
Y our fame will fly, and we encourag'd shall  
F rom BARRIFFS YOUNG ARTILLERY MAN, seek all  
F or honours VVreath: & to fill fame by Warre,  
E v'n here in England, and abroad full farre.

THOMAS WHITLEY, Lievt.





CHAP. I.

Concerning Postures and handling  
of Armes.

**T**He first Rudiments of education, wherewithall to enter young *Souldiers* which desire to be *instructed* in that part of the *Art Militarie*, which concerneth the *Infantry* (or *Foot-souldiers*) ought to bee *the well mannaging and handling of their Armes*; which may easily bee attained by frequent *practice*, and the *Souldiers* thereby be brought to use them with *ease, safety, and delight*: where to the contrarie (without *exercise*) the *easiest Armes* become not only troublesome burthens unto the *unskilfull bearers*, but too often prove dangerous and hurtfull both to themselves and fellowes that *ranke and file* with them. Neither need any bee *disheartned*, for no man is borne a *souldier*, nor can attaine to any excellencie in the *Art militarie* without *practice*; But by *practice* is gained *knowledge*; *knowledge* begets *courage and confidence*; few or none being *fearfull* to execute what by frequent *practice* they have thoroughly learned.

B

And

And therefore it will be necessarie for every one that intends any *proficiencie* in this part of the *Art militarie*, first to be *instructed* in the *Postures* and well *handling* of their *Arms*; (a thing much to be desired in our *Trained Bands*, though small hope of amendment, seeing that our *Souldiers* are scarce called forth to *exercise* either *Posture* or *Motion* once in foure or five yeares. Whose the fault is, I know not: only I pray God that it may be amended, lest shame and infamy be the least of evils which our carelesse security may bring upon us: Yet pardon this digression, for my zeale to my Countries good had almost transported mee beyond the bounds of my intent, but of this no more. I will now come to the *postures* of the *Musket* and *Pike*: ) which some conceive, are fittest to *begin* from the *taking up* of their *Armes*, and *arming* the *Souldiers*, concluding them with the *laying downe* of their *Armes*, or *disarming* them. Neverthelesse, because that some (especially such as have beene in the parts beyond the seas) have not accustomed themselves to any strict observance of *Posture*; for the *arming* and *disarming* of the *Muskettier*, but after the manner of the *field* come *ready charged* and *shouldered*, and so from thence making the entrance or beginning to the *Postures*; by which meanes others have been imboldned too censoriously to object against the rest as superfluous: which they themselves at some time or other cannot avoid. Therefore to the end that they also may have satisfaction, I have so placed the *Postures* of the *Musket*, that they may make use of so many of them, as they shall think  
neces-



necessarie, and leave the rest to such as require a more exact and ample satisfaction. But before I expose the *Postures* to the publike survey, mee-thinkes I heare some alreadie inquiring what is *Posture*? Wherefore, that I may satisfie them, and not be troublesome to others; In brieft thus.

*Posture in a Souldier is the garbe or figure, that he useth in the handling of his Armes, consisting of severall Motions for atchieving of each Posture. The Motion being the working part; the Posture, the alteration or act, either in circumstance or matter: As to rest your Musket being one Posture, to shoulder your Musket another, so likewise for the rest: howbeit some perchance will object (as formerly hath bin to one of Athens, making a long oration in the praise of Hercules his valour) and say, who ever doubted of it? So to mee, who ever questioned these for Postures? yet I have known them not only questioned, but written against; peremptorily concluding that there are but three Postures to be used for the Musket: whose errors I shal easily confute. But more of this after the Postures of the Musket. Wherefore for the more orderly proceeding, conceive their Armes to lie before them on the ground; and then the first command will be, to stand to their Armes.*

The definition of Posture.

*The manner of Arming the Muskettier, and Postures of the Musket.*

**T**Ake up your Bandeliers.

Put on your Bandeliers.

Take up your Match.

Place your Match.



Take up your Musket and Rest.

Rest your Musket.

Now if you please you may performe your saluting Posture.

Poyse your Musket.

Shoulder your Musket.

Take your Rest into your right hand, and you are armed ready to March.

Thus being armed, with Muskets shouldered, some account their Postures to begin from this place, which may be done either standing or moving, as they successively follow.

Take your Match betweene the fingers of your right hand.

Put your Rest string about your left wrist, and carry your Rest in your left hand.

Return your Match between the fingers of your left hand.

Unshoulder your Musket, and Poyse.

Joyne your Rest to the outside of your Musket.

Open  
Cleere  
Prime  
Shut } your Pan.

Cast off your loose Corns.

Blow off your loose Corns, and bring about your Musket to the left side.

Traite your Rest, and ballance your Musket in your left hand.

Charge with powder.

Draw forth  
Shorten } your Scowring stick.

Charge

Charge with Bullet.

Put your Scowring stick into your Musket.

Ram home your Charge.

Withdraw  
Shorten } your Scowring stick.  
Return }

Bring forward your Musket and Rest.

Poyse your Musket and recover your Rest.

Thus having *charged* some men will *shoulder* and so from thence *make ready*; beginning their *Postures*, from the *unshouldring* of the *Musket*: accounting of those past, as *Motions of Posture*. But they doe but tangle themselves in their owne snares: therfore I proceed.

Joyne your Rest to the outside of your Musket.

Draw forth your Match.

Blow your Coale.

Cock } your Match.  
Fit }

Guard your Pan.

Blow the Ash from your Coale.

Open your pan.

Present upon your Rest.

Give fire brest high.

Dismount your Musket, joyning your Rest to the outside of your Musket.

Uncock and return your Match.

Cleere } your pan.  
Shut }

Poyse } your Musket.  
Shoulder }

Take your Match between the fingers of the right hand.



Take your Rest into your right hand, cleering your string from your wrist.

Return your rest into the left hand, the string loose.

Return your Match into your left hand.

Unshoulder your Musket, and Poyse.

Rest your Musket.

Set the But-  
end of your  
Musket on the  
ground, some  
(though im-  
properly) call  
Ordering the  
Musket.

\* Set the But-end of your Musket on the ground.

Lay down your { Musket and Rest.  
Match.

Take off {  
Lay down { your Bandeliers.

The Sentinell  
Posture.

March from your Armes.

There is likewise the *Sentinell posture*; which is, The *Muskettier* having his *musket* charged with *Bullet*, his *Match* cockt, his *Panguarded*, stands with his *Musket* rested, ready to performe such duty as shall be commanded or given him in charge. Some have likewise taught to *make ready* on, or from the *Sentinell posture*: But note that as none comes to stand *Sentinell*, but comes ready charged; so if any occasion happen that he must give fire in the time of his *standing Sentinel*, it causeth a *generall alarm*: so that he will have no fit time to *make ready upon his Rest*. Wherefore, I conceive it superfluous; but will ever conforme to better judgement.

\* The Funerall  
Posture.

We have also the \* *Funerall posture*, which from the *Rest* is to be performed at three *Motions*, but cannot so well be exprest in writing, as it will expresse it selfe in *Action*. Wherefore seeing that it is rather an Ornament to Obsequies, than truly necessarie for *Armies*, I will not spend more time about



about it, but come to the *Postures* of the *Pike*. Yet before I passe upon them, give me leave to answer some, which out of a Criticall humour will alwaies bee carping at others, condemning these *Postures*, saying, There are more by halfe, than are either good or usefull; and that there are no more *Postures* to be used, but *Make ready*, *Present*, *Give fire*. The which wee will not deny, that in *Service* there are any other usefull: notwithstanding I would have them to know, that \* *Make ready* Make ready, no Posture. is no *Posture*, but a word of *Command*, including all *Postures*, from the first arming of the *Souldier* to the *Present*: or if the *Muskettier* bee charged, *Shouldered*, or *both*, then the word (*Make ready*) commands the prosecution of the rest of the *Postures* which are betweene the *Posture* you then immediately are at, when the word is given, and the other *Posture*, *Present*: for which reason, when we teach *Muskettiers* at first, it is most necessarie to instruct them punctually, from *Posture* to *Posture*; which being once attained, they will manage their *Armes* more surely, more comely, with more celerity, and with better execution: and at the first may easily bee taught the best way. \* But if Ill customes hardly reclaimed. they have once got an habit of doing ill, there will bee as much or more paines spent in reclaiming their errors, as at first to teach them the best, safest, and readiest way.

## CHAP. II.

## Of the Postures of the Pike.



That which followeth next of course is the *Posture* of the *Pike*: Wherefore that we may observe *order* in our proceeding; we will likewise conceive their *Pikes* to lie in like manner before them on the *ground*: And then, as before, the first *Command* will be, To *stand* to their *Armes*.

Handle }  
Order } your *Pikes*.

(a) Open order for the *Pike*, is when the *Filles* stand at double distance, or open order at the least; then the *Pike-men* are to extend their *Right armes*, and place their *Pikes* about a foot to the right of the right legs: it is usefull onely to make a gallant shew.

To your { (a) open }  
{ (b) close } Order.

Charge with the *But-end* of your *Pike* at the inside of your right *Foot*, your *Pike* in the left hand, drawing your *Sword* over the left *Arme*.

Charge to the { Right,  
Left,  
Reere.

Order your *Pikes*, and put up your *Swords*.

Note that these *Charges* at the *Foot* are to receive a desperate *Enemy* on *Horse*, upon a stand in some strait, or other place of advantage, the *Muskettiers* to give fire over the *Pikemens* heads, or else-where, at the discretion of the *Commander*.

(b) Close order is to place the *But end* of the *Pike* on the inside of the right foot, and is onely usefull upon a stand, to receive and abate the fury of the *Horse*, upon a desperate charge.

From

From } Port  
Order } Comport } your } Order as you were.  
      } Cheek } Pikes. }  
      } Traile }

Charge } Front  
to the } Right } Order as you were.  
      } Left }  
      } Reere }

Shoulder your Pikes }  
*Advance your Pikes*

From } Port  
Advance } Comport } your Pikes. } Advance as  
      } Cheeke } you were.  
      } Traile }

Charge to the } Front  
      } Right } Advance as you were.  
      } Left }  
      } Reere }

*Shoulder your Pikes.*

From the } Port  
Shoulder } Comport } Your Pikes. } Shoulder as  
      } Cheeke } you were.  
      } Traile }

Charge to the } Front  
      } Right } Shoulder as you were.  
      } Left }  
      } Reere }

(c) Charge to the Reere is to be understood alwayes to the left about, because it is 3. times a neerer way then charging to the right about.

From *Comport*, *Cheeke*, or *Traile*, the *Pikeman* may at the discretion of the *Commander* charge either to the *Front*, *Reere* or *Flanks*, as shall be necessary or thought expedient. I will do it only once over, for the *charges* will be all alike, whether you *Comport* from *Order*, from *Advance*, or *Shoulder*. And so likewise for *Cheek* and *Traile*, &c.

From



From Comport }  $\left\{ \begin{array}{l} \text{Front} \\ \text{Right} \\ \text{Left} \\ \text{Reere} \end{array} \right\}$  Comport as you were.  
Charge to the

Check your *Pikes*.

From the Check }  $\left\{ \begin{array}{l} \text{Front} \\ \text{Right} \\ \text{Left} \\ \text{Reere} \end{array} \right\}$  Check as you were.  
Charge to the

Traile your *Pikes*.

From the Traile }  $\left\{ \begin{array}{l} \text{Front} \\ \text{Right} \\ \text{Left} \\ \text{Reere} \end{array} \right\}$  Traile as you were.  
Charge to the

Order }  
Lay down } your *Pikes*.

I shall undergo the censure of some, for that they will finde more *Postures* of the *Pike* here then formerly they knew of, and so by their conclusion more then there is any need of; for now-a-dayes there are such that will limit *discipline*, to the verge of their own knowledge; and whatsoever else they shall see either *acted* or written by others that is without the lists of their kenning, they will peremptorily conclude for superfluous and improper, howsoever I shall alwayes referre my self to the judgment of the more judicious.

The *charges* of the *Pike* are twofold, either for *defence* or *offence*. *Charges underhand* or *overhand*: but diyers and different they are from their severall *wayes* and *Postures* from which they are

The use of  
the *Pike*.

or

or may be done, although they are not all alwayes *usefull*, yet at some times they may be *usefull*, and therefore very requisite to be known to all such as either are, or at least would be accounted for good *Souldiers*.

As I have set down the *Postures* themselves both of *Musket* and *Pike*, so it were not amisse, if that the *Motions of Posture* were likewise here exprest. But because they will take up too much time, and fill too much paper, and the Subject it self not pleasing unto many; I will spare my labour, and my Book the lines, rather suffering the censure of curtail'd brevity, then tedious prolixity

CHAP. III.

Of the Drum.



Our *Souldiers* being sufficiently instructed in the *Postures* of such *Armes* as they carry, (or are appointed to use:) the next thing they are to learn, is the knowledge of the severall beats of the *Drum*, which is as requisite to be learnt of the *Souldier*, as any thing else in this way. For the *Drum* is the voice of the *Commander*, the spur of the *valiant*, and the heart of the *coward*; and by it they must receive their directions when the *roaring Canon*, the *clashing of armes*, the *neighing of horses*, and other confused noise causeth, that neither *Captain* nor other *Officer* can be heard. Therefore it will

will be necessary that every Souldier should learn these sixe severall Beats, viz.

1 A Call.                      3 A March.                      5 A Battaile.

2 A Troop.                      4 A Preparative.                      6 A Retreat.

A Call.

1 By a *Call*, you must *understand* to prepare to heare present *Proclamation*, or else to repaire to your *Ensigne*.

A Troop.

2 By a *Troop*, *understand* to *shoulder* your *Muskets*, to *advance* your *Pikes*, to *close* your *Ranks* and *Files* to their order, and to *troop* along with (or *follow*) your *Officer* to the place of *Randevous*, or elsewhere.

A March.

3 By a *March* you are to *understand* to take your open order in ranke, to *shoulder* both *Muskets* and *Pikes*, and to *direct* your *March* either *quicker* or *slower*, according to the *beat* of the *Drum*.

A Preparative.  
c.v3.

4 By a *Preparative* you are to *understand* to close to your *due distance*, for *skirmish* both in ranke and file, and to *make ready*, that so you may *execute* upon the first command.

A Battaile.

5 By the *Battaile* or charge, *understand* the continuation or pressing forward in order of *battaile* without *lagging behind*, rather boldly stepping forward into the place of him that falls dead, or wounded before thee.

A Retreat.

6 By a *Retreat* *understand* an orderly retiring backward, either for *reliefe*, for *advantage* of ground, or for some other *politicall end*, as to draw the enemy into some *ambushment*, or such like. Much more might be written concerning the *Drum*, but this may suffice for the present.



CHAP. IV.

Of Rankes and Files, their places  
and dignities.

**N**OW that our Souldiers are somewhat  
skilfull in managing of their armes,  
and no lesse capable of the severall  
beats of the Drum, it is high time for  
them to know the difference between a Ranke and  
a File. Wherefore know that a Ranke is a row of  
men, sometimes more, sometimes fewer, standing, mo-  
ving, or marching even a brest, or (as some write)  
pouldron to pouldron, or shoulder to shoulder. A File  
is a sequence of men, standing one behinde another,  
backe to belly in a straight line from Front to Reere,  
consisting sometimes of 6. 8. or 10. men, on some  
occasions the Spaniards make them 12. deepe. But  
when any one would shew much variety of exer-  
cise, then 8. will be the more pliant and dividuall  
number, yet for service in the field, where men are  
not altogether so expert (as I could wish our Coun-  
try-men were) 10. men is the fittest number, not  
onely for the cause aforesaid, but also because that  
10. is the square root of a 100. and is a better num-  
ber to draw Companies into grosser bodies.

What is a  
Ranke.

What is a  
File.

Where men  
are expert 8. is  
a sufficient  
depth, and may  
better keep  
their order the  
when they are  
deeper.

And now I think it would not be much amisse  
if I should here insert the severall places of digni-  
ty and precedencie in Ranke, as also in File. Where-  
fore because that \* Files are first to be drawn forth,  
and that by adding or joyning of Files together,  
Rankes

In placing  
your Men first  
draw your  
Souldiers  
forth in Files,  
and not in  
Ranks as some  
have fondly  
used.

*Ranks are made; we will begin first with Files. Wherefore conceive their dignities according to the figures or numbers here under placed, first in File, then of Rank, lastly of both conjoynd.*

Front.		Front.	
Number of Place.	Number of Dignitie.	Number of dignity.	Number of place.
1.p.1.	2 6 7 3 4 8 5 1	2. 6. 7. 3. 4. 8. 5. 1. 0.	4.p.4.
2.p.5	p.p.p.p.p.p.p.p	p.p.p.p.p.p.p.p. 1.	5 p. 3.
3.p.8.	8.7.6.5.4.3.2.1	8.7.6.5.4.3.2.p.5.	6.p.7.
4.p.4.	Number of place.	Nüber of place.3.p.8.	7.p.6.
5.p.3.			8.p.2.
6.p.7.			
7.p.6.			
8.p.2.			
Reere.			

It will not be of it self sufficient that I have both *marked* and *figured* the *places* and *dignities* to each particular *man* in his *File* and *Ranke*, but it will be looked for of some, that I should back my *opinions* either with *sound*, and *good reasons*, of mine owne, or at the least with the *opinions* of some *others*: as for such as have *employed* themselves upon this *subject*, they have been as *divers* in their *judgements*, as their *number*, each *man* having a *fancie* to his own *way*. And if it were much *materiall*, I might have here demonstrated unto you, the severall *opinions*, of *Leo*, *Robertellus*, *Count Mansfield*, *Sir Thomas Kellie*, and many *others*: whose *workes* being *extant*, I will spare the labour.

labour. But above all the rest that ever I read, Captain John Bingham hath in my judgement best delivered himself in this particular : which although he have exprest by way of *Tetrarchies* and *Mirrarchies*, yet the same may be understood as well by *Rankes* and *Files*. His words are these :

“ \* Every Tetrarch is over foure Files, in all which the  
 “ Commander that bath the right, hath the first place ;  
 “ he that bath the point of the left, the second place ; he  
 “ that standeth on the right hand next to him, the third  
 “ place. The last place is his that standeth next to the  
 “ Commander of the right point on the left hand : He  
 “ demonstrates it by way of figure thus.

In the Tacticks of Alian lib. 1. the Notes of the 10. Chapter.

	p.m.m.	m.m.p.	p.m.m.	m.m.p.	
Right wing	1. 5. 1.	4. 8. 4.	3. 7. 3.	2. 6. 2	Left wing.
The Middle.					

## CHAP. V.

Reasons for precedency of dignity in  
*Rankes and Files.*

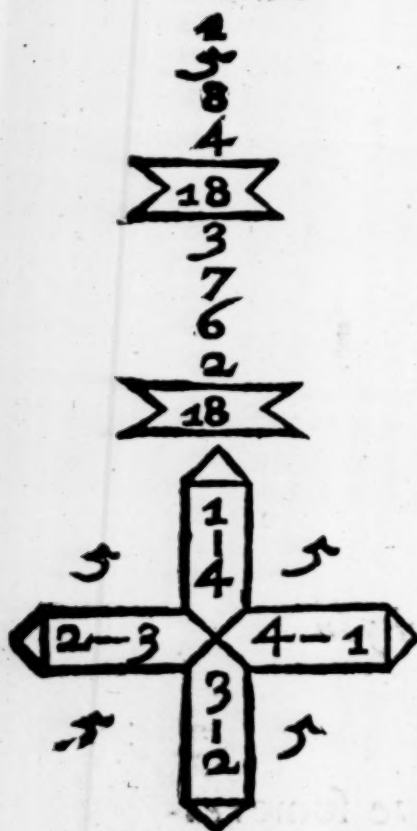


Shall now endeavour to give some reasons for these severall places of dignity in *Ranke and File*. And first for that Geometricall proportion, gives both  
*life*



life, and being, to orderly discipline, consider that all parts of the body, ought to be answerable. VVherefore seeing that the joyning of Files and Rankes produceth greater Bodies; it is necessary that a true proportion should be kept from the beginning: and that in drawing forth of Files they observe to make the Reere half File answerable in skill and worth to the Front half File. And that the file-leaders, and half-ranks of the left flank, should be equivalent in worth, skill, and valour to the right flank, that the Reere division hold like proportion with the Front division, and that all parts of the body Front.

be ballanced with true proportion, so neere as the knowledge of the Soldiers, and the number of the men will give you leave; and that there may be correspondency in their worth, place, and dignity, you may observe by adding the figures of number together, which are in the Margent, where you shall finde that the dignity being added together of the Front half file, makes the number of 18. And the worth of the Reere half being in like manner added, makes the like number. So also shall you find the dignity and worth of the File leaders of the left flank, to parallell the worth of those on the right flank by the same rule.



If you will have it yet more cleere, observe that the file-leader is the chiefe in his File, the bringer up the second, the half File leader the third, the last

last man of the *front halfe file* the *fourth*. Now note, that as the *worth* of the *first* precedes the *second*, so the *worth* of the *third* exceeds the *fourth*: Adde the *first worth* to the *fourth worth*, and that makes *five*: adde the *second worth* to the *third*, and it makes the same *number*; so that there is *equality* throughout the *Battell*, both in *Front*, *Reere*, and *Flankes*: for it were unreasonable, that all the *chiefe men* should be on the *right Flanke*, and all the *worst* on the *left*. For the *left* must be *opposed* to the *enemies right*. The *File leader* ought to be *worthiest*, because he hath the *command* of his *File*, and *marcheth* the *first* against his *enemy*. The *bringer-up* ought to be the *second*, because his *place of march* is in the *Reere*, and is in most *danger*, should the *enemy charge* on that *part*: the *halfe file leader* is the *third* in *honour*, because that when the *halfe file* is *taken off* upon any *occasion*, he is the *leader* (unlesse they bee *commanded* to *face about*) the *last man* of the *front halfe file* is the *fourth man* in *dignity*, for when the *Reere division* is *taken off*, then hee is the *Bringer-up*. The next *man* to the *file leader* hath the *fifth place* of *honour*, for that one *doubling* brings him *into the front*. The next *man* before the *bringer up* hath the *sixt place* of *honour*, for that if the *body* bee *faced about*, one *doubling* brings him *into the front* *accidentall*, or keeping the *proper front* by once *doubling* of *ranks*, he becomes *bringer up* to his *file-leader*. The *seventh place* of *honour* is his that *marcheth* next after the *halfe-file leader*, for that when the *halfe files* *double the front*, or *marcheth forth*, then one *doubling*, *rankes* him *even* with the

C

front.

front. The eighth and last place of honour is his that is the third from the front, the file being but 8 deep, which may also be made a file-leader, though with more trouble than the rest: for by counter-marching Front and Reere into the middest, and then facing to the former front, and after doubling of rankes, makes him likewise a file-leader. Now, as every mans dignity is more or lesse in his file, so is all his ranke with him. Wherefore this that hath already beene said, may suffice to demonstrate unto those which as yet are ignorant of the severall places of dignity, both in Ranke and File. I might have enforced many other reasons concerning the dignity of number and place: but I have insisted longer upon this subject, then at first I intended, which makes mee the more willing, though somewhat abruptly to breake from it, and come to shew the manner of joyning or drawing up of Files into Battalia. And therefore this may serve for all, the Serjeant that hath order to place them, is to lead them up according to their worth and honour. As first the right hand file; then the left hand file; and so the other files successively within them according to their severall worths and places. As by the following figure you may more plainly perceive.

Dignity



Front.  
Dignity of place.

Left Flanke.  
Number of place.

0	2	6	7	3	4	8	5	1	0
1	m	m	m	m	m	m	m	m	1
2	m	m	m	m	m	m	m	m	5
3	m	m	m	m	m	m	m	m	8
4	m	m	m	m	m	m	m	m	4
5	m	m	m	m	m	m	m	m	3
6	m	m	m	m	m	m	m	m	7
7	m	m	m	m	m	m	m	m	6
8	m	m	m	m	m	m	m	m	2
0	8	7	6	5	4	3	2	1	0

Right Flanke.  
Dignity of place.

Number of place.  
Reere.

If there bee *any* that shall say these are *nicities*, and of no *repute* amongst *Souldiers*, I dare say they have beene well *reputed* of by good *Souldiers*, no disparagement unto the *fault-finders* (if there happen to be any such.) As for the *noble*, *worthy*, and *well-knowing* *Souldiers*, I am almost *confident* that out of their true-speaking *judgements*, they will either conclude that it is so *used*, or at the *least*, that it *ought* so to be; but if this can *work* no *effect* with the ——— I leave every man freely to his owne *judgement*, desiring the *judicious* alwaies to hold a favourable opinion of my well-meaning.

## CHAP. VI.

*Of the severall distances.*

\* Ignorant  
Souldiers most  
ambitious.



\* Distance it  
selfe not mo-  
tion.

Now that our Souldiers have attained some small knowledge in the use of their *Armes* (mee thinkes like some of our \* *little knowing Souldiers* of the *Trained bands*) they already be-  
ginne to bee ambitious of *file-leaders places*; ther-  
fore that their owne weaknesse may light them  
to reade their owne follies, we will see how they  
will behave themselves in *exercise* amongst the  
Company. Wherein the first thing wee are to in-  
struct them in, is their *distances*. But because it is  
held by some a matter disputable, whether *di-*  
*stance* be one of the *Motions* or no: Wee will first  
declare what is *distance*. To which I answer, that  
indeed \* *distance* it selfe is no *motion*, but there is *mo-*  
*tion* in producing such *distance*; for *distance* is the  
*space of ground between man and man, either in file or*  
*Ranke, having relation onely to the place betweene each*  
*partie*. All the rest of the *motions* having not  
onely relation to the one, but the other. Where-  
fore not to spend more time in a matter so appa-  
rent, wee will say that the *discipline* of a *foot-com-*  
*pany* consists chiefly in *distance* and *motion*. And  
therefore seeng that *distance* is the *ground* of *mo-*  
*tion*, and that no *motion* can be performed without  
*distance*, wee will leave to discourse it, and fall to  
the matter it selfe, and shew how many sorts of  
*distanc*

distance is ordinarily used in our moderne discipline, which are these foure here under named, viz.

Close Order,	{	which is	One foot and a halfe.
Order,			Three foot
Open Order,			Sixe foot.
Double distance,			Twelve foot.

It hath been the opinion of some ancient Commanders, that the distance of Ranke, was alwaies double the distance of file, although they went both under one and the same denomination. As that order in file was three foot, order in ranke sixe foot, open order in file sixe foot, open order in ranke twelve foot, and so of other distances. But the best received opinions hold them to bee alike both in ranke and file.

There is to be considered in distance these three especially, that is,

Distance for	{	March.
		Motion.
		Skirmish.

You are to observe, that your distance for march is to be three foot betweene file and file, and sixe foot betweene ranke and ranke; distance for motion sixe foot both in ranke and file, distance for intire doublings, wheelings, and skirmish three foot in ranke and file. Close order is onely usefull for your files of Pike-men, when they are to receive a Charge from the horse: that so they may stand the stronger, by so much as they are the closer serried together.

It next followes, that I shew the divers words of command, and direction; for the severall openings and closings of rankes and files. But I shall first re-

Distance of Rank is to be understood between Rank and Rank.  
Distance of File is to be understood between File and File.  
The exact place from whence to measure your distance is from the Center of your men, whether it be Rank or File.  
These 3. distances especially remarkable.



commend to the care of the *curious Discipliner*, that in the first place hee *command* his *Souldiers* to *even* their *rankes*, and *streighten* their *files*: to be *silent* and *attentive* to their *words of command*, and *direction*: which being performed, the *words of command* for *distance* are as followeth.

In motion of  
Files you are  
to observe  
your Leader.

*Rankes and files to your close order.*

*Files open to the right* }

*Rankes open forward* } *to your order.*

*Files open to the right* }

*Rankes open forward* } *to your open order.*

In motion of  
Rankes you  
are to observe  
your right  
hand man.

*Files open to the right* }

*Rankes open forward* } *to your double distance.*

*Files close to the right* }

*Rankes close forward* } *to your open order.*

*Files close to the right* }

*Rankes close forward* } *to your order.*

*Files close to the right* }

*Rankes close forward* } *to your close order.*

*Files open to the left* }

*Rankes open backward* } *to your order.*

*Files open to the left* }

*Rankes open backward* } *to your open order.*

*Files open to the left* }

*Rankes open backward* } *to your double distance.*

*Files close to the left* }

*Rankes close backward* } *to your open order.*

*Files close to the left* }

*Rankes close backward* } *to your order.*

*Files close to the left* }

*Rankes close backward* } *to your close order.*

*Files*

Files } open { right and left }  
 Rankes } to the { front and reere } to your order.

Files } open { right and left }  
 Rankes } to the { front and reere } to your open order.

Files } open { right and left }  
 Rankes } to the { front and reere } to your double distance.

Files } close { right and left inward } to your open  
 Rankes } to the { midst ———— } order.

Note that when files open to the right, the left-hand file must stand fast, every file taking his distance from the file next his left hand: And when they open to the left, then the right hand file stands, every file taking his distance from the file next his right hand. Observe also that when ranks open forwards, then the last rank stands, every ranke taking his distance from the ranke next behind him: And when they open backwards, then the first ranke is to stand, every ranke to take his distance from the ranke next before him. You are likewise to take notice in the action, that you are either to face to the right, or to the right about.

Observations  
 for the open-  
 ing of rankes  
 and files.

Note also that in closing of files, if it bee to the right, then contrary to the opening, the right hand file stands; the rest closing to the right, taking their distance from their next right hand file. If you close to the left, then the left hand file stands, the rest of the files closing to the left, taking their distance in like manner. When files close to the right and left, then they close inward, taking their distance from the files within them, neerer to the midst of the body. Also note, that when files are commanded to open to the right and left (or by division) it must be outward. If

Observations  
 for the closing  
 of rankes and  
 files.

*Ranke*s close to front and Rere, then the first and last ranke stand; the others taking their *distances* from them. If they close *ranke*s towards the center or midst, then they close towards their two middlemost *ranke*s.

It is not required that every *Captaine* or other *Officer* that shall exercise a *Company*, shall use all these severall *openings*, and *closings* which are here exprest, but rather that hee shall make use of so many of them, as hee shall thinke fit for his present occasion or exercise. Although they all may be usefull at some time or other. I may spare examples, for it must needs bee apparent to the meanest capacity.

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CHAP.

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Front.

C

Deep March.

25

m m m m

m m m m S 4.

m m m m

D 2

m m m m

m m m m

m m m m

m m m m

m m m m

E.

p p p p

p p p p

p p p p

D 1

p p p p

p p p p

p p p p

p p p p

p p p p

S 1

p p p p

p p p p

p p p p

D 4

p p p p

p p p p

p p p p

p p p p

p p p p

S 2

m m m m

m m m m

m m m m

D 3

m m m m

m m m m

m m m m

m m m m

3 S m m m m

L

Reere.

## CHAP. VII.

*Of Marching the Company in Divisions, with the order and places of the Officers.*



**O**ur Souldiers now being somewhat expert in their distances, we will next draw them forth into a deep March. Wherefore note, that our files must be at order, and our Ranks at open order: the Muskettiers of the right flank, are to make the Van, and to march next after the Captain; The Pikes are to make the battell, and to march after the Ensigne, either in one or two divisions, according to their number. The Muskettiers of the left flank (sometimes called the second division of Muskets) make the Reere Guard, which is led commonly by the second Serjeant. Howbeit if there be but one division of Pikes, then the eldest (or chiefest) Serjeant leads the second division of Muskettiers. If the Company be but small, then it is best to make but two Divisions, one of the Muskettiers, another of the Pikes; For the placing of the rest of the Officers, you may perceive by the figure in the Margent: Wherefore note that M. stands for Muskets, p. for Pikes, D. for Drummes, S. for Serjeants, E. for Ensigne, L. for Livetenant, and C. for Captaine.

Note, if you have but three Drummes, then let the Drumme in the second division of Pikes be wanting: If onely two, then upon a March, the first between the third and fourth ranke of the front division of Muskettiers. The second between the third and fourth ranke of the second division of Pikes.

Note that between each Division in March, there ought to be 12. foot distance; 6. foot before the Officer, and 6. foot behinde him.

CHAP.

## CHAP. VIII.

*Of drawing the divisions up into a square.*



When you would bring your *body* againe into *Battalia*, command your *front division* to make *Alt or Stand*; then give order to your *Ensigne* either by a *Serjeant*, or by some *signe* to lead up the *first division* of *Pikes* on the *left* of the *first division* of *Muskettiers*, with his *colours flying*, and the *Pikes* to continue *shouldered*, so long as the *Drumme* beats a *March*. But if it beat a *Troop*, then the *Pikes* are to *advance*, and close their *Ranks* forward to their order, and so the *Ensigne* to troop them up with his *colours fierld*. The eldest *Serjeant* is to lead up the *second division* of *Pikes*; The second *Serjeant* in like manner is to lead up the *second or reere division* of *Muskettiers*; each *division* still *marching* up to the *left* of that *division* next before it. The manner you may plainly see in the *figure*, where the *front division* is marked in the *Reere* with the letter

A. The first *Division* of *Pikes*

with the letter

B. The second

*Division* of *pikes*

with C. The se-

cond *Division* of

*muskettiers* hath

in the *Reere* the

letter D. The o-

ther *figure* on the

other leaf in form of a *square* shewes their standing, after the *Divisions* are led up. All the *file-leaders* standing even

S. 2.

m m m m

m m m m

m m m m

D.

m m m m

m m m m

m m m m

m m m m

S. 3. m m m m

L. D.

C. S4

m m m m

m m m m

m m m m

D.

m m m m

m m m m

m m m m

m m m m

m m m m

E.

p p p p

p p p p

p p p p

D.

p p p p

p p p p

p p p p

p p p p

S. 1.

p p p p

p p p p

p p p p

D.

p p p p

p p p p

p p p p

p p p p

p p p p

C.

B.

E				C			
2	6	7	3	2	6	7	3
4	8	5	1	4	8	5	1
S 2	1	m	m	D	p	p	p
2	m	m	m	p	p	p	p
3	m	m	m	p	p	p	p
4	m	m	m	p	p	p	p
5	m	m	m	p	p	p	p
6	m	m	m	p	p	p	p
7	m	m	m	p	p	p	p
S 3	8	m	m	D	p	p	p
2	1	m	m	D	m	m	m
5	m	m	m	m	m	m	m
8	m	m	m	m	m	m	m
4	m	m	m	m	m	m	m
3	m	m	m	m	m	m	m
7	m	m	m	m	m	m	m
6	m	m	m	m	m	m	m
2	S	4					

Distance of *place*, and *motions* of the *Body*, are that part of the *Art Military*, used for the *instru-ction*, and *disciplining* foot *Souldiers* : whereby to fit and *enable* them, to the *quick*, *true* and *orderly* performance, of all *formes*, and *figures* of *Battaile*, as may best suit with the *time*, *number*, *place*, and *dis-cretion* of the *Commander*. And may rightly be di-vided into these *five* generall heads, (*viz.*) *Di-stance*, *Facings*, *Doublings*, *Countermarches*, and *wheelings*, which have (not unaptly) bin compa-red to the *five vowels* : For as without one or more of the vowels, no word can be spelled, so without one or more of these, neither *form*, nor *action* can be performed.

CHAP.



## CHAP. IX.

*What is Facing, and the use of the word, whether to be used or refused.*



Efore we come to shew the varietie of *Facings* in the action, I think it will not be amisse to speak a word or two in the way of *definition*: what is ment by *Facing*? To which I answer, That *Facing* is a particular turning of the *Aspect* from one part to another, whereby the *Front* proper becomes a *Front* accidentall: And a *Front* accidentall, may be reduced to his proper *Front*. There are some so seemingly curious, that by no meanes they will allow of the word *Face*: Concluding it altogether unnecessary; And no other word must be given, but, *To the Right, To the left, &c.* Yet I wonder that men will *stumble* at so small a *straw*, which cannot chuse but be better used than refused. For the word *Face* is but one syllable, and quickly pronounced, and gives so clear an expression of the intent of the *Commander* that it concludes it necessary. As for example, Should you command a *Company* to *double Ranks* to the *right*, and then command them *as they were*, and then say, *To the left*, it might puzzle a good *Souldier* at the first, to discern whether he should *face* or *double*: The like mistake might be among *Countermarches*: Wherefore I conceive that none can justly tax it for superfluous, seeing the easiest

The word  
Face necessary  
to be used,

\* easiest expression hath alwayes been accounted for the best. Yet spare me, for my intent is not to overway any man in his opinion, but rather to deliver mine; leaving all men freely to their own likings.

\* The easiest & plainest instructions are alwayes to be preferred in the teaching young Souldiers.

If my intent were to make a great Book with a little matter, I might then here insert *figures* for every particular *Facing*, and their *Reducements* to their *first Posture*, which would take up divers sheets of paper, and to little purpose. For I suppose that every Man that knows any thing, may easily conceive the *Idea* of any ordinary *Facing* in his minde. Wherefore I will shew but one or two of the hardest. You are to observe that for the true performance of *facings* every Man is to turn upon the *ball* or *center* of the *left foot*, and to move from the *ground* onely with the *right*. The *left foot* being the keeper of *Ranke* and *File*.

In the exercise of the motion of *facings*, you are to be at open order in *Ranke* and *File*.

Face to the	{	Right	}
		Left	
		Right and left	
		Right about	
		Left about	
		Right and left inward	
		Right } angle	
		Left }	
		Four Angles	

As you were.

When you face to any hand in the *Reducement*, you are to returne by the contrary.

The *front half files* standing, it will be requisite for the *half files* to the *reere*, to do as much by themselves: whereby, they will the more aptly perceive, how that the *subdivision* goeth under the

the denomination of the *half files*, &c.

<i>Half files face to the</i>	{	Right	} <i>As you were.</i>
	{	Left	
	{	Right and left	
	{	Right } about.	
	{	Left }	
	{	Right and left inward	

Face to your  
Leader, a word  
of Reduce-  
ment.

There is a word which is ordinarily used and proper, for *reducements* of *Facings*, which is, *To your Leader*.

There is another *Facing* also sometimes Com-  
manded, which is, *Face to the Center*, and is most  
proper when the *body* stands in some *circular form*,  
or *hollow square*. We have also a *Facing*, which  
causeth the *Body* to *face to the front, reere, and  
flanks*, which some call, *Facing square*.

## CHAP. X.

*Of Facing square, and how to perform it, the  
usefulnessse of facings, and the severall  
parts thereof.*



Then we instruct our *Souldiers* how  
to *face square* (if the *Body* be but  
8. deep) command, the *two first  
Ranks* stand fast, the *two last Ranks*  
*face about*, the rest of the *Body* *face to  
the right and left*. If the *Body* be deeper, we com-  
mand more *Ranks* to the *Front*, and so likewise  
to the *Reere*. It will be very necessary for young  
*Souldiers*

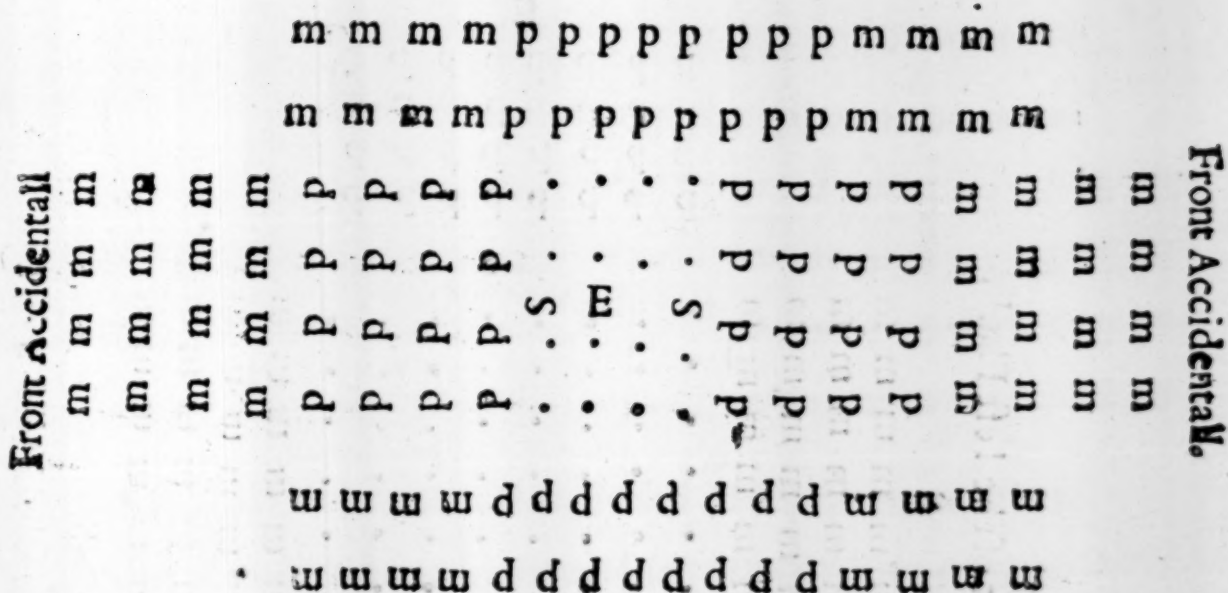


Souldiers to move 10. or 12. paces upon every motion of facings, whether they are entire, or divisionall. I will now prick two severall figures of facing, which will be sufficient to demonstrate all the rest.

Face square and march.

Proper Front.

C



L

The Front of the Reere.

The words of *Command*, commonly used to produce this figure, are these as followeth.

Two first ranks stand.

Two last ranks face about.

The rest of the body face to the right and left, (then) march all.

let them order their Armes.

When your Souldiers begin any motion, let them advance their Armes. When they come to a stand, and have performed their motion,

To

To reduce them to their first order.

Face all about to the right, march and close your divisions.

Face all to your Leader (who then stands at his front proper.)

Facing square another way, & marching upon it.

The Front proper.

C

E

P P P P P P P P  
P P P P P P P P  
P P P P P P P P  
P P P P P P P P

S

The Front of the left Flank.

S  
m m m m m . . . . . m m m m m  
m m m m m . . . . . m m m m m  
m m m m m . . . . . m m m m m  
m m m m m . . . . . m m m m m  
m m m m m . . . . . m m m m m  
m m m m m . . . . . m m m m m  
m m m m m . . . . . m m m m m  
m m m m m . . . . . m m m m m

The Front of the right Flank.

S

S

d d d d d d d d  
d d d d d d d d  
d d d d d d d d  
d d d d d d d d

The Front of the Rere.

The

The words of command customarily used to produce this figure are these as followeth,

*Muskettiers face to the right and left.*

*Half files of Pikes face about to the right, (then) march all.*

To reduce them to their former order,

*Face all about to the right, march and close your divisions.*

*Face all to your Leader, and then they are reduced.*

*Facings* are so usefull and necessary, that you may as well dispense with any one of the grounds of Discipline, as with them; for they are usefull almost upon all occasions, and not onely sooner executed than any other of the motions, but may be needfull when wheelings and Countermarches cannot be used, as in a strait. There are no more then foure facings intire, besides Angular; as for Divisionall, there be divers, and indeed very necessary many of them be, as occasion may offer it selfe for their severall uses; howsoever peremptorily to say, there be so many and no more, I conceive, hath been concluded by none; but it still rests at the discretion of the Commander, to exercise more or fewer of them, as he best liketh, and the necessity requireth either for action or exercise.

*Intire facings* are so called, when the aspect of the whole Company are directed one way.

*Divisionall facings* are so called, when the aspect of the Souldiers are at one and the same time directed divers and severall wayes: as to the front and reere, the right and left, or to al foure at once, &c.

D

Angular



Angular,

*Angular facings* are so called, when the *aspect* of the Company is directed to the *right corner* Man, which is the *right Angle*, or to the *left corner* Man, which is the *left Angle*; or to the *four corner* Men, which are the *four Angles*.

The use of  
Angular fa-  
cings.

*Angular facings* were of great repute among the ancients, for their *figures* called the *Diamond*, the *Wedge*, the *Sheeres*, the *Saw*, and such like, when they made such *formes* of *battell*. But in our *modern Discipline*, I conceive them to be of little or no use, onely thus, we honour the memory of the *Ancients* in their practise. And some say they are very fit for *exercise*; for that by their use the *Souldier* is made more *apt* and *perfect* in the other. Therefore let this suffice to be spoken concerning *facings*, and now be pleased to turn your *aspect*, and take a *view* how our *young Souldiers* will behave themselves in the performance of the *doublings*.

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## CHAP. XI.

*Of Doublings, their use and parts.*

**D***oublings* are to most excellent and singular good use for the *strengthening* of any part of the *Battell* according to the occasion, or discretion of the Commander, and consists of these *two generalls*; *Doublings of length*, and  
*Doublings*

*Doublings of depth*, all times in *quantity of number*, sometimes both in *number and place*, both having this *restriction*, to be *doublings of ranks or flanks*. Every particular *doubling* pointing at one of these, although there be *sundry and divers wayes* for the doing of them, each of them being to very good purpose, for some consideration or other. *Doublings of Ranks*, from what form soever it be done, doth make the *number double* so much as it was before, and sometimes doth *extend the length of the battell* to double the *proportion of ground*, as well as *number*.

Doublings of Ranks alwaies extending the length, either in Number, or Place, or both.

*Doublings of files (or flanks)* do also *double the number in depth*, and sometimes becomes a *doubling* both of *number and place*. Wherefore for the better understanding of *doublings*, observe with me these *sixe usuall waies* following.

Doublings of files (or flanks) alwaies extending the depth either in Number, or Place, or both.

*The severall parts or branches of Doublings*

Doublings of {  
1 Ranks.  
2 Half-files.  
3 Bringers-up.  
4 The Reere.  
5 Files.  
6 Half-ranks.

The first is the *doubling of ranks*, and is when every *even rank doubleth into the odde*. The second is, when the *half files double their ranks forwards into the front*. The third, when the *Bringers-up double their ranks forwards into the front*. The fourth when the *front-half files dou-*

*bleth the Reere.* These first foure being *doublings* of ranks, the length of the *battell* being by them extended either *simply* in number, or both in number and place. The next two are *doublings* of flanks: the first whereof is the ordinary *doublings* of files, every one of the *even* files being inserted into the *odde* files, accounting from the hand named. The next is the *doubling* of half-ranks, which is to be understood when one flank *doubleth* the other, either by *passing through*, *countermarch*, *doubling intire*, or *divisionall*.

You are to note in this *motion* of *doubling*, that as there is one part of the *body* stands, so the other part *moves*: the *standing* part is to be *doubled*, the *part moving*, are those that *double*, as you may perceive by the *figures*, which shew the manner of each *doubling*. That which next followes are the words of *command*, and *direction* for *doublings*, with their severall *reducements* following next after them.

Note, that the distance for particle, and divisionall doublings, is open order in Rank and File. Note also that the ordinary doublings of Ranks and Files, is or ought to be performed by three steps, first stepping forth with that foot which is next unto the place named, and in the reducement, to return by the contrary hand.

*The words of Command for Doublings, with their Reducements.*

Ranks {right } double { Ranks as you were.  
to the {left }

Files {right } double. { Files as you were.  
to the {left }

Bringers up double your Ranks forward to the right.

Bringers up face about to the left, march forth into your places.

Bring-



Bringers up double your ranks forward to the left.

*Brangers up face about to the right, march forth into your places.*

Files to the right } outward }  
and left double } inward } *Files as you were.*

Halfe-files double your rankes forward to the right.

*Halfe-files face about to the left, march forth into your places.*

Halfe files double your rankes forward to the left.

*Halfe files face about to the right, march forth into your places.*

Front half files } and double the reer to the right.  
face about to }  
the left } *March forth into your places.*

Front half files } and double the reere to the left.  
face about to }  
the right } *March forth into your places.*

Front half files countermarch to }  
the right } and double the  
Front half files countermarch to } reere.  
the left }

The word of reducement for either is, *Front halfe-files as you were.*

Halfe rankes to the right, by countermarch double your left flanke.

*Halfe rankes that doubled face to the right, march forth into your places.*

Halfe rankes to the left by countermarch, double your right flanke.

Note that in these doublings of rankes and files, if you double ranks to either hand, doubling of files to the contrary, reduceth them. Or in doubling of files to any hand, doubling of ranks to the contrary will reduce them.

*Halfe ranks that doubled face to the left, march forth into your places.*

Half ranks of the right, double your left flank.

*Halfe ranks that doubled, face to the right, march forth into your places.*

Halfe ranks of the left, double your right flank.

*Halfe ranks that doubled face to the left, march forth into your places.*

Note that upon all motions of doubling, that they who are to double, before they move from their places, are to advance their Armes: When they have performed their doubling, they are to conforme to the Posture of those whom they double, whether it be Order, Advance, or Shoulder.

Halfe files double your front to the right intire.

*Halfe files face about to the left, march forth into your places.*

Halfe files double your front to the left intire.

*Halfe files face about to the right, march forth into your places.*

Halfe files double your front inward intire.

*Halfe files face about to the right, march forth into your places.*

Halfe files double your front by division.

*Halfe files face about to the right and left inward, march forth into your places.*

Front halfe files double your reere by division.

*Front half files face about to the right and left inward, march forth into your places.*

Front halfe files double your reere to the right intire.

*Front halfe files face about to the left, march forth into your places.*

Front halfe files double your reere to the left intire.

*Front halfe files face about to the right, march forth into your places.*

Halfe ranks of the right, double your left flank intire advancing.

*Halfe*

*Halfe ranks that doubled, face to the right, march forth and take your places.*

Halfe ranks of the left, double your right flank intire advancing.

*Halfe ranks that doubled face to the left, march forth and take your places.*

Halfe-ranks of the right, double your left flank by division

*Halfe ranks that doubled, face about to the right march forth into your places.*

Double your ranks to the right intire.

*Ranks that doubled face to the left, and march into your places.*

Double your ranks to the left intire.

*Ranks that doubled face to the right, and march into your places.*

Double your ranks by division.

*Ranks that doubled, face to the right and left inward and march into your places.*

Double your files to the right intire, advancing.

*Files that doubled face about to the left, march downe into your places.*

Double your files to the left intire, advancing.

*Files that doubled, face about to the right, march downe into your places.*

Files double your {right.} files that doubled, as  
depth intire to the {left.} you were.

Files double your depth to the right, every man falling behind his bringer up.

*Files that doubled, as you were.*

Files double your depth to the left, every man falling behind his bringer up.

*Files that doubled, as you were.*

Note that all  
entire dou-  
blings, are to  
be performed  
at Or. or both  
in Ranke and  
File.



## CHAP. XII.

*Of inversion and conversion, and of  
doubling rankes.*



Here is yet another *doubling* of the *depth*, which is called *Inversion*. But because some out of their *ignorance* make little or no difference betwixt *Inversion* and *Conversion*, give me leave for the clearing of the doubt, to place *Conversion* and *Inversion* together, that by their contrary *effects* the difference may be the more *perspicuous*, to such as shall be desirous to know them. Yet before I either enter upon *Figure* or *Command*, for *Inversion* or *Conversion*, I hold it necessarie to shew some of the *Figures* of those *Doublings*, for which I have already given the words of *command* and *redacements*. And then next after them, I will place both the *words* of *command*, and the *Figures* belonging to *Inversion* and *Conversion*.

This *Figure* next following is a *Doubling* of *Ranks* to the *Right*, where you may perceive how the *even Rankes* are *inserted* into the *odde Rankes*: the *prickes* denoting the places they stood in, before the *Doubling* beganne, the *little line* or *stroke* drawne from the *prickes*, shewing the manner of the

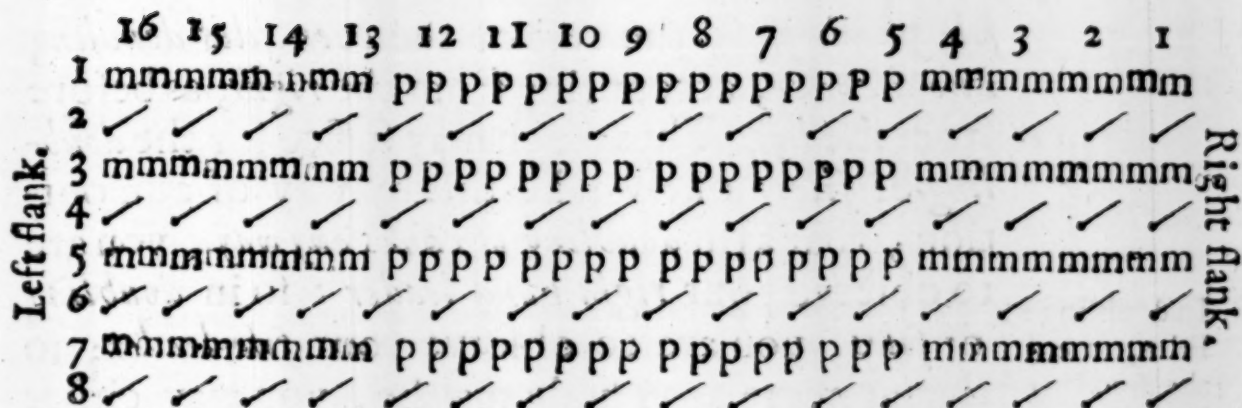
the doubling : I think it would be needlesse to make another figure , to shew the doubling of ranks to the left; for the meanest judgement may by this figure easily apprehend what the other would be.

Note that in the doubling of Ranks, the even Ranks are to double into the odde, beginning alwaies to reckon from the first Rank.

The Command is,  
*Ranks to the right double.*

The Direction is,  
*Every even rank move at 3. steps into the odde.*

Front.



Reere.

*Ranks as you were.*

CHAP.

## CHAP. XIII.

*Doubling of Files.*

**I**N *Doubling of files* ever observe this rule, that the *even files* are to be inserted into the *odde files*; alwaies beginning from the *hand named*: as for example, in this present *doubling of files*, the *left hand file* stands fast, the *second file* doubleth into it, the *fourth file* into the *third*, and so for the rest. If your Command be to *double* your *files* to the *right*, then contrariwise the *right hand file* stands fast, the rest of the *even files* doubling into the *odde*, accounting from the *right*, as before from the *left*. Thus much may suffice for the *doubling of files*: onely take this by way of admonition; that as in *doubling of ranks any way*, you are to observe your *right hand leader*: so in *doubling of files*, you are to observe your *file-leader*; so that as neere as possibly may be, you may either in *rank* or *file*, be altogether in one *motion*. If you please further to observe with me, that this *doubling* is a *doubling of number*, and not of *place*, the *depth of the battell* not being thereby extended, for further satisfaction observe this *figure*.

In doubling of Files, note if the doubling be to the left, as in this Figure, then every man of the even files, steps behinde his left hand

The



The Command is, *Files to the left, double.*  
The Direction is, *Every even file from the right, at three steps move into the odde.*

Man at three steps, every even File doubling into the odd files beginning your account with the outmost File to the hand named, as I have formerly said,

		Front.															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Left Flank.	1	m	/	m	/	p	/	p	/	p	/	p	/	m	/	m	/
		m		m		p		p		p		p		m		m	
	2	m	/	m	/	p	/	p	/	p	/	p	/	m	/	m	/
		m		m		p		p		p		p		m		m	
	3	m	/	m	/	p	/	p	/	p	/	p	/	m	/	m	/
		m		m		p		p		p		p		m		m	
	4	m	/	m	/	p	/	p	/	p	/	p	/	m	/	m	/
		m		m		p		p		p		p		m		m	
Right Flank.	5	m	/	m	/	p	/	p	/	p	/	p	/	m	/	m	/
		m		m		p		p		p		p		m		m	
	6	m	/	m	/	p	/	p	/	p	/	p	/	m	/	m	/
		m		m		p		p		p		p		m		m	
	7	m	/	m	/	p	/	p	/	p	/	p	/	m	/	m	/
		m		m		p		p		p		p		m		m	
	8	m	/	m	/	p	/	p	/	p	/	p	/	m	/	m	/
		m		m		p		p		p		p		m		m	

Recre.

In this doubling of Ranks by bringers-up, as like wise in all the of like nature, the hat are to move, we to advance the r Armes, But if the Command r please, it will be best for the ease of the Musketers, to be should v d. And up n all doubling of Ranks what- soever, let the n be sure to observe the r r h hand men.

The Reducement, *Files as you were.*

#### CHAP. XIV.

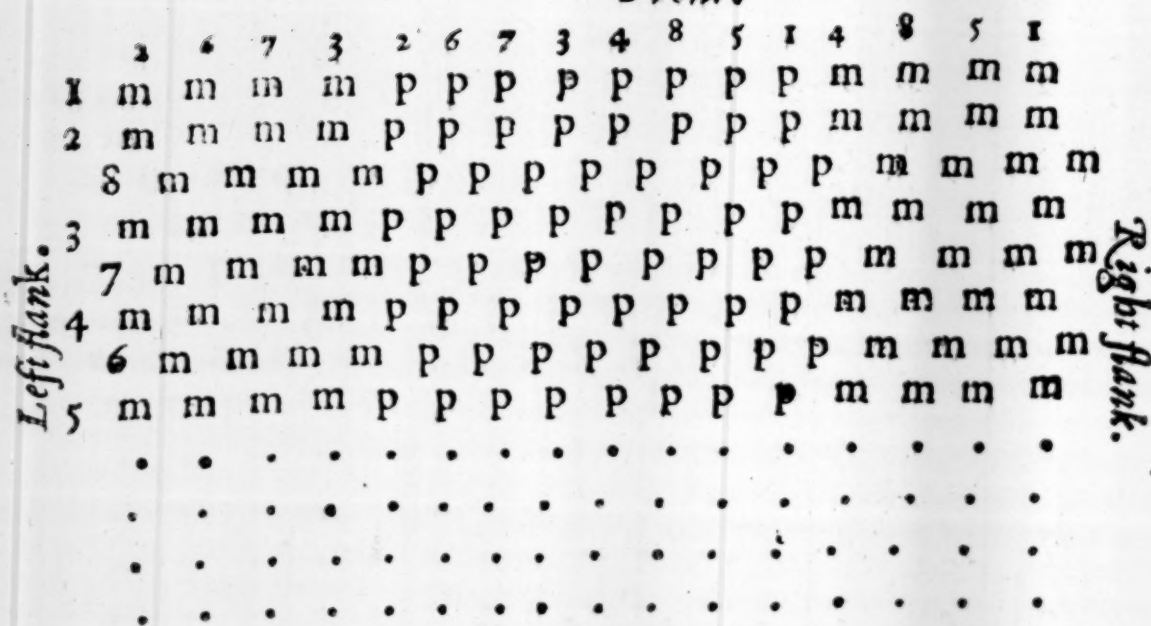
##### *Of Doublings by bringers up.*

**T**He doubling which next followeth shall be a doubling by *Bringers up*, of which sort, one figure will be sufficient which I hold most necessary to demonstrate in manner of motion, the figure followeth.

The

The Command is,  
*Bringers up double your Ranks forward to the right.*  
 The Direction is, *The last Rank passe forwards to the right, and rank even with the front, the rest following successively.*

Front.



Reere.

The Reducement, *Bringers up face about to the left, march forth into your places.*

This doubling  
 differing from  
 the last.

This doubling of Ranks by Bringers up, differeth from the other doubling of ranks, first done, both in quantity and quality. In quantity it differeth, in regard the other leaves a large distance between Rank and Rank, being double the distance they formerly stood at, this contrariwise continuing and preserving the same distance they formerly stood at between each Rank. In quality it also differeth, in regard that it brings the best and second sort of Souldiers, together into the Front. The manner of this doubling you may plainly

plainly perceive by the *figure*, the *Motion* of this *doubling*, and way to perform it, is as followeth. The *eight* or last *rank*, which are the *bringers up*, passe forwards *even* in *rank*, through or *between* the *intervalles*, to the *right* of them that stand before them, untill they come *even* in *rank* with the *Front*; The *seventh rank* following those which *marched* from behind them, placing themselves in the *second Rank*, the *sixth* in the *third*, the *fifth rank*, or *half-file* in the *fourth* or *reere* of the *front half-file*. This *doubling* maketh a very able *Front*, in bringing all the best *Souldiers* together. And although it hath *diminished* the *number*, in regard of the *depth*, yet it hath *doubled* the *number*, in the *length*. This *doubling* is in *quantity* of *number*, not of *ground*. When you *march* into your *places*, remember this, that the *Rank* which last took his *place* in the execution of this *Motion*, must *first march* into his *place* in the way of *reducement*. For as they are led on by their *bringers up*, contrariwise they are led off by their *half file leaders*.

This doubling,  
a great  
strengthening  
to the Front.

In the *doubling* of the *Front* to the *left* by *bringers up*, it is the same, onely differing in this, that whereas before it was to the *right*, this is to the *left*. Wherefore let this suffice for *doublings* by *bringers up*.



## CHAP. XV.

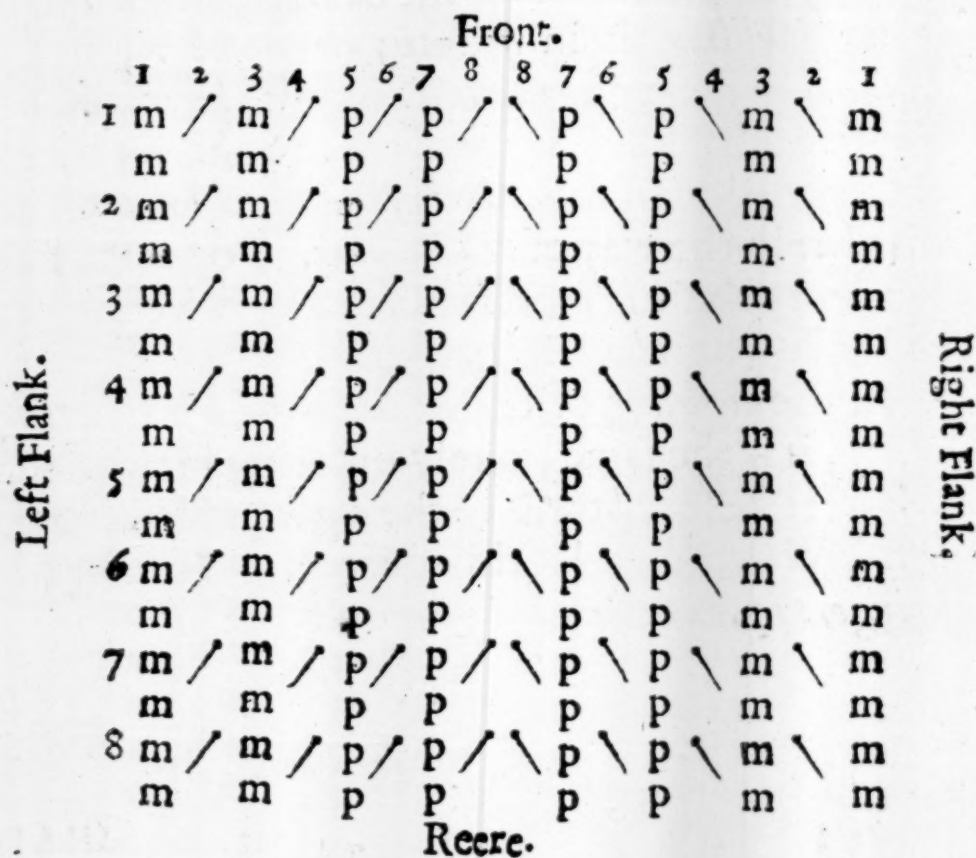
*Doublings of Files outward and inward.*

He next *doubling*, is a doubling of files outward, which works the same effect; as to *double files* to the right and left. For the *right flank* is to double to the right, the *left flank* to the left. As you may plainly perceive by the following figure.

The Command is,

*Files to the right and left double outward.*

The Direction is, *The outmost files of each flank stand, the even files from each flank double into the odde.*



*Files as you were.*

This

This *doubling* of files to the *right* and *left outward*, strengthneth both the *flanks* at once; by *doubling* their numbers in *depth*: But it weakneth the *inward* part, where it taketh two files clean away, leaving a large *intervale* in the *midst*. Some say it is good when a *Commander* will grace any, to bring them through the *center* or *midst* of the *Battalia*. But you must note, if you have an *odde* file you cannot so punctually perform it, as when the number of your files be *even*. The manner of the *doubling*, you may perceive by the *Figure*; the *motion*, by the *little lines* drawn from the *Pricks*: the performance is as followeth.

The *outmost* file of each *flank* stands; the second files *double* into them; the third file from each *flank* stands; the fourth file *double* into the third; the sixth into the fifth, and so likewise for the rest.

If you would *double* files to the *right* and *left inward*, it is to be done the contrary way: For whereas in this figure of *doubling* last performed, the *outmost* Files stand, the other *doubling* outward into them: Contrariwise the two *inmost* Files should stand, the rest *doubling* to them *inward*. And whereas in this there is a larger distance in the *midst*, then is in any other part; the other part Contra would be closest in that part. Some men do not approve of either of these *doublings*. I leave every man to his own choice. The practise tends to perfection, and he that can do much may do lesse when he listeth.

Doubling files  
to the right  
and left in-  
ward.





Doubling our Rankes forward by the *Halfe-files*, is a Motion generally approved of by all for serviceable, if it be done with conveniencie. It differeth from the other doubling by *Bringers up*, in quality, not in quantity, (for therein they keep one proportion :) In quality it differeth thus: The doubling by *Bringers up* brought the *best* and *second* sort of souldiers together into the *front*; the *fourth* and *third* sort into the *reere*: So that the *reere* was worse than the *front*: this doubling by *Halfe-files* brings the *best* and the *third* together into the *front*, and leaves the *second* and *fourth* in the *reere*: so that the *front* is made more able than the *reere* by  $\frac{1}{3}$ . It differeth likewise in Motion thus, For whereas in the other doubling, by *Bringers up* the Motion was begunne, by the last *ranke*, every *Ranke* following the *Ranke* which came from behind him: this contrariwise is directly led forth by the *fift ranke* from the *front* (if they be but eight deepe) and so is executed more surely and suddenly; the *fifth Ranke* passing into the *first*; the *sixth Ranke* into the *second*; the *seventh* into the *third*, and so for the rest. For the *reducement*, when they are commanded to face about to the left, and march forth into their places; then as the Motion was led on by the *Halfe-file leaders*, so in the *reducement*, they are led off by the *Bringers up*: Doubling of *halfe-files* to the left produceth the same effect; onely the contrary hand.

Doubling by halfe file, by the Greekes called *Parembolē*, or insertion. *Tact. Alian.* 3. & 1.


Doubling by halfe-files makes the front to preceede the Reere by one third.

In the Reducement of thi doubling the *Bringers up* are the Leaders of the Motion.

## САР. XVII.

*Of doubling the Reere by Front halfe-files.*



 He *doubling* of the *Reere* by *Front* half-*files*, is differing from the *doubling* last shewne, more in *manner* than *matter*; Both concurring in substance, although differing in circumstance. To say more of it, were more then needed; onely peruse the *figure* which presents it selfe unto you (as it is in *motion*)

*The Command is, Front your half-files double your  
Reer to the right.*

*The Direction is, Front halfe-files, face to the reere,  
and March downe even to the last Ranke.*

*First Front,*

. . . . . I  
 . . . . . 2  
 . . . . . 3  
 . . . . . 4  
 w w w w d d d d d d d d u u u u r  
 m m m m p p p p p p p p m m m m 5  
 w w w w d d d d d d d d u u u u 2  
 m m m m p p p p p p p p m m m m 6  
 w w w w d d d d d d d d u u u u 3  
 m m m m p p p p p p p p m m m m 7  
 w w w w d d d d d d d d u u u u 4  
 m m m m p p p p p p p p m m m m 8

*Reere.*

*Front half-files, face about to the Left, march forth into your places.*

# This

This *doubling* of the *Reere*, by the *Front halfe-files*, is to be performed after this manner. (The *Command* being first given) the *front halfe-files* face about to the left, (the *Pikes* being all advanced, the *Muskets* all either *poysed* or *shouldered*) and so being led by the *Halfe-file-leaders* to the *reere*, which are those that hold the fourth place of honour, they march directly forwards to the left of the other part of the *body*, which stood faced in opposition; untill the *leaders* of the *doubling* have ranked even in *ranke* with the *bringers up*, the rest ranking even with the other *standing rankes*, according to their *places*: If it be for *service* that this *doubling* is used, then the whole *body* is to face about to the *reere*, being the part to be doubled: If onely for *exercise*, then the *Commander* may (if hee please) keepe his *place*, and the *doubling* being performed, face the whole *body* to the *Leader*, and command for the *reducement*; *Files* to the right, double intire advancing; which reduceth each man to his first place.

The *Ranke* which holds the fourth place of honor are the *Leaders* of this Motion.



## CHAP. XVIII.

*Of Doubling the Reere, by Counter-march.*

Here is another manner of Doubling of the Reere, by the Front halfe-files, contrary to that shewne in the precedent Chapter, which is done by the way of the *Lacedemon Counter-march*; which some would rank amongst the *Counter-marches*. Because (say they) the Motion is a *Counter-march*. But the *act intended*, or thing wrought, is a doubling; and if it were to have the denomination of a *Counter-march*, then it ought not to mixe with any other part of the *body*, onely to *Counter-march the front into the midst*, and there to stand, without passing forward to the Reere; (which makes it a *doubling*) and then it might be accounted for a *part-Counter-march*. But as it is here commanded, and performed, it is a *doubling*. Observe the Command and Figure following.

A part-Counter-march is when one Moity or part of the body

countermarcheth, thereby not altering the number of the length, or depth of the Figure; but onely transterring one part into another.

It is at the discretion of the Commander, to face the Companie which way hee pleaseth, either for Motion, or Reducement of any Motion formealy performed.

*Front*

The Command is, *Front halfe-files, Countermarch to the left, and double the Reere.*

The Direction is, *Reere halfe-files, Face to the reere and stand: therest Countermarch to the left, and lose ground.*

*First front.*

	2	6	7	3	2	6	7	3	4	8	5	1	4	8	5	1
	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m
2	w	w	w	w	d	d	d	d	d	d	d	d	w	w	w	w
4	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m
1	w	w	w	w	d	d	d	d	d	d	d	d	w	w	w	w
5	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m
6	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m
7	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m
8	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m

*Reere.*

*Front halfe-files about to the Left, march forth into your places.*

This doubling of the *Reere* by *Counter-march*, produceth the same effect to the *Reere*, as doubling the front by *Bringers up* doth unto the front. The *Counter-march* by which it is performed, is a *Counter-march* of losse of ground: we will speake more of it amongst the *Counter-marches*. The Command to reduce it is (if the Commander stand at the head of that part that is doubled.) *Front half-files, face about to the left, march forth into your places.* If he keep his first stand, having faced them to him; Then,

*Front halfe files, march forth into your places. To double the Reere to the Left, by Countermarch, is the same, differing onely in the hand. I will next shew a doubling of the left flanke, by way of Countermarch.*

---

CHAP. XIX.

*Of Doubling Flankes, by way of Countermarch.*



*Alse rankes (or flankes) are then said to be doubled, when the depth of your Battalia is increased to double, their former proportion, of Number or place, (or both) which may be done divers waies. But this Chapter, and Figure is onely to demonstrate unto you the doubling of the left flank by way of Countermarch. The Figure followeth: as the doubling is in motion.*

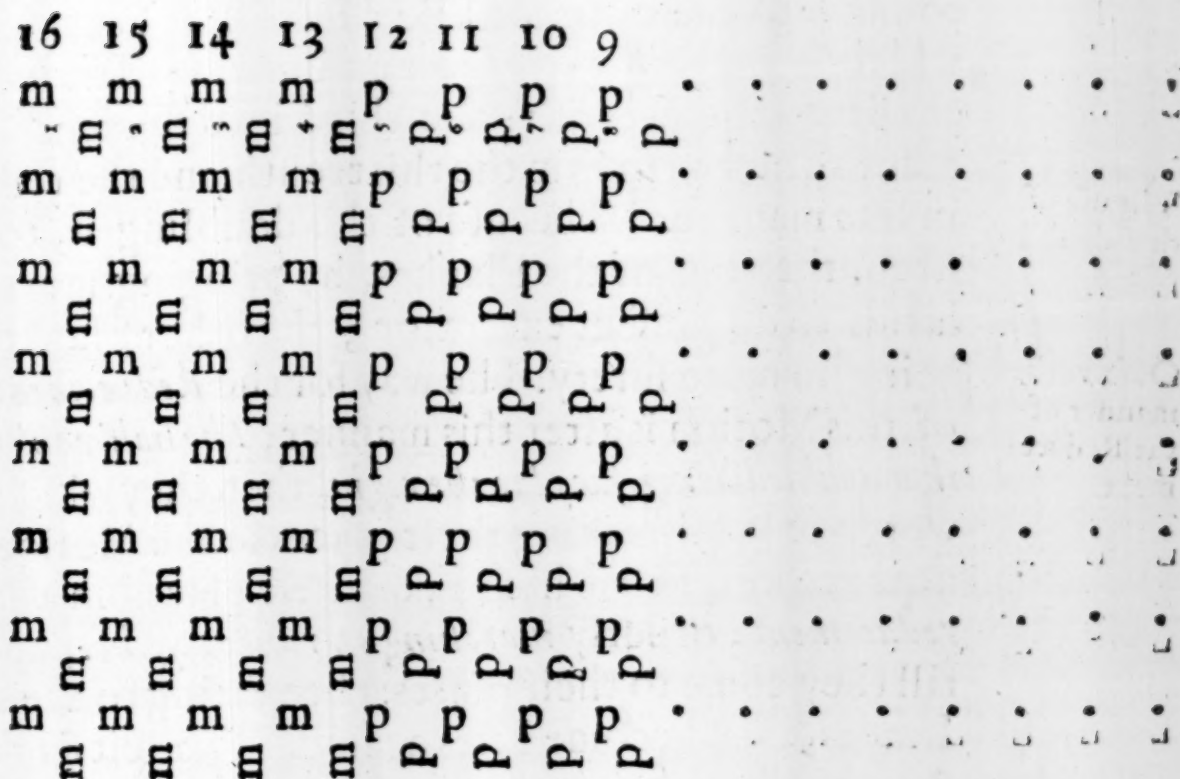
*The*



*The Command is, Halfe-ranks to the Right by Counter-march, double your left flanke.*

*The direction is, Face to the Right, and Counter-march to lose ground.*

*Front.*



*Reere.*

*Halfe-ranks that doubled, face to the Right. March forth into your places.*

This doubling of *Halfe-ranks* by *Counter-march*, is a doubling of *Number*, not of *Place*; for the depth still retaines the same proportion in quantity of ground; only augmented by one man, the length of your Battalia, being diminished both in *Number* and *place*; the right flanke being wholly inserted,

The use of  
this doubling.

Observe the  
manner of  
the Reducement.

*serted, into the left Flanke, as you may perceive by the Figure; the Motion is to bee performed on this manner: The half-rankes of the right, face to the right, and then Even in ranke together, Counter-march betweene the Intervals, untill the outmost file to the right, which is marked with the figure 1, bee come into the outmost File of the left Flanke, which is marked with the number 16. The second into the fifteenth; the third into the fourteenth; the fourth into the thirteenth: and the rest in like manner. The use of this doubling is, to strengthen one of the Flankes, by bringing more hands to do present execution; the other Flanke being in more surety. The way for the Reducement of this Motion is after this manner; The half-rankes that doubled being faced to the right, then they which were the last, in taking their places in the Motion now are the first which take their places in the redacement; orderly marching in ranke together, untill they come to their places: then facing to their Leader, they become Files againe. The left flank may in like manner double the Right by Counter-march; the difference is this: the right Flanke stands, the left Flanke is inserted into the right, as before the right was into the left. To shew another figure for it, would be altogether needlesse.*

## CHAP. XX.

*Doubling half files to the right intire to accommodate the doubling of half Ranks.*



Should now come to shew another manner of *doubling of flanks*, by inserting the one *flank* into the other, a different way from that last shewen. But if I should perform it, as the body stands, in the ordinary square, flanked with *Muskettiers*: then it would produce a mixture of *Armes*. To avoid which, before you enter upon this *doubling*, of *passing in, through or between your half ranks*; Cause your *half files to double the Front to the right intire*, which being performed, you may then proceed to the doubling of your *flanks*, any way without mixture of *Armes*. If I should have shewen this motion with *Pikes* or *Muskettiers* alone, this first doubling of *half files intire*, might have been spared: but I desire not to leave any thing obscure or difficult, but to render it as easie and apparant as I may, to the capacity of the meanest reader: and if any place in this small Treatise of mine shall seem ambiguous, I shall intreat the courteous to impute it to my lack of language to expresse my self, rather than any wil in me to conceale, or obnubilate the sense, whereby to deprive them of the true meaning of any thing in this Book contained. But lest by *doubting of words*, I prove tardy in my work; I will forbear further circum-



circumstance, and come to the prosecution of the matter: which in the first place, will be a *doubling of half files to the right intire*, whereby the next doubling may be the more commodiously accomplished. The figure followeth.

The command is,

*Half files, double your front to the right intire.*

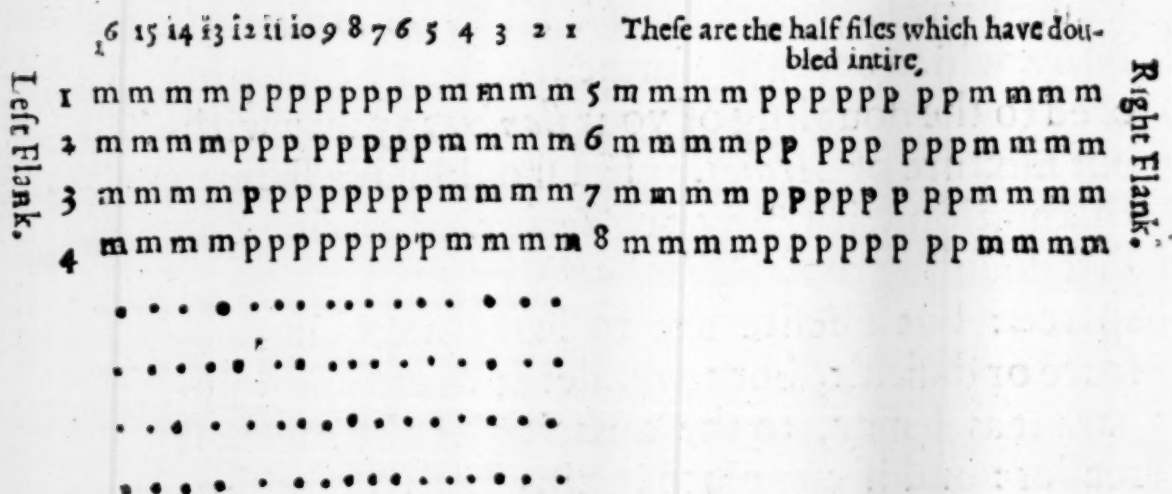
The Direction is,

*Half files face to the right and March.*

*Face to your Leader.*

*March up, and even your front.*

Front.



Reere.

This *doubling of half files to the right intire*, I have fully exprest in the figure, as the body stands, the motion being ended: because we are to adde another *doubling*, before we reduce them. This figure next following, will be best shewen in the

the

the motion or action, not fully performed: that thereby the manner may be the more easily discerned. But by the way observe, that this *doubling of half files*, is a doubling both of number and place; for the length of the *Battalia* is not onely double so many a brest as they were before, but they also have extended their length to double their proportion of ground, which formerly they did occupie. I forbear to speak more of this doubling, untill we come to shew it in motion: and now proceed to the next *doubling* upon this.

All intire doublings are doublings both of number and place.

The Command is,  
*Half franks of the right, double your left flank.*

The Direction is,  
*Half franks of the right, face to the left and march, face to your Leader.*

Front.

32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
m	m	m	m	p	p	p	p	p	p	p	p	p	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e
m	m	m	m	p	p	p	p	p	p	p	p	p	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e
m	m	m	m	p	p	p	p	p	p	p	p	p	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e
m	m	m	m	p	p	p	p	p	p	p	p	p	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e

Reere.

*Half franks that doubled, face to the right, march forth into your places.*

This

This *doubling of half ranks*, is a more speedy and sure *doubling*, then the *doubling of half ranks* by *countermarch*: notwithstanding it is most commonly used when the body consists but of one sort of *Armes*, being either all *Muskettiers*, or all *Pikes*. Neverthelesse because in my figures I have as well *Muskettiers* as *Pikes*, I have made use of a *doubling by half files intire*, and from that have *doubled my left flank*, so to prevent the *mixture of*

Mixture of  
Armes at some  
time may be  
necessary.

*Armes*: \* However *mixture of Armes* upon some occasion may be *necessary*. The manner to perform the motion, is this. The *left flank stands*, the *half ranks of the right*, *face to the left*; and then the *inmost file of the right flank*, (all the files of the right flank, being by this facing become ranks) is the *Leader of this motion*, marching forth directly to their *left hands*, between the *intervalles of the ranks of the left flank*, untill that the *sixteenth file which now is become a rank*, have placed themselves orderly in the *two and thirtieth file*, (which is the *outmost file of the left flank*.) The *fifteenth in the one and thirtieth*, the *fourteenth in the thirtieth*: the *thirteenth in the nine and twentieth*; and so likewise of all the rest. The places may be perceived by the *figure*. The *doubling is of number*, and not of *place*. \* For *reducement to both these doublings*, first cause the *half ranks which last doubled*, to *face to the right*, and so to *march into their places*. They that *last took their places in the motion*, are the *first that take their places in the reducement*. The *doubling of half ranks being thus reduced*; Next for the *reducing of the*

The reducement, to both these doublings; and first to reduce the doubling of the left Flank,

halfe



*half files*, (which were *doubled* before, for the accommodating of the *doubling of half ranks*) Command the *half files* to *face about to the left*, and to *march forth into their places*: Wherewith I will conclude these sort of *doublings*, which require *open order in Rank and File*, and come next to shew *intire doublings*, which claim a closer distance for their true performance. And therefore conceive them closed to their \* *order*, both in *Rank and File*.

The doubling half files to the Right intire reduced.

Order both in Rank and File the true distance required for intire doublings.

## CHAP. XXI.

*The difference between intire and divisionall doublings, and of doubling half-files intire.*



Aving closed our Souldiers to their due distance, I will next proceed, to shew *doublings intire*. But methinks, I heare some already inquiring; what is meant by *intire doublings*; and therefore without offence to the curious, give me leave to be so courteous to tell them, that all *Doublings*, are either *intire* or *divisionall*. *Intire Doublings* being these, or such like, as when the *files*, or *half-files*, *ranks*, or *half-ranks*, (according as the command shall be given) do *march forth joyntly together*, without *division* or *dissipation*, to double the part *commanded*. *Particle and divisionall Doublings* being such, as I have *formerly shewn*; as when the *files* or *half-*

What intire Doubling are

What is meant by Particle, and dividuall Doublings.

half files, ranks or half-ranks, are disranked and divided into more parts or places than one. This may serve for way of distinction : I will now shew *intire* doublings, as they are in action : and first begin with doubling half files. The Figure followeth.

The Command is,  
*Half-files double your front to the left intire.*

The Direction is,  
*Half-files, face to the left and March.*  
*Face to your Leader.*  
*March up and even your front.*

Front.

### Front of the Motion.

[illegible]

Reere.

*Half-files, face to the right, march forth into your places.*

**Doubling by half-files in-tire, a service-able doubling.**

This *doubling of half-files intire*, hath been held a better *doubling*; then either the ordinary doubling of *Ranks*, or the usuall way of doubling by *half files* or *bringers up*: some of the causes are these. First it makes no disturbance to the o-  
ther

ther part of the *Battalia*; but that it may either be executed in time of *motion*, *exercise*, or *skirmish*. Secondly, it appears another *solid body*, to the great *disheartening* of any enemy. Thirdly, it is very apt for *over-fronting*; being a doubling both of *number* and *place*. That it hath been used by *antiquitie*, take one example out of *Polybius*. *Philip* the *Achaian* Generall having ranged his *Battalias* in form of *Plagiophalanx*, the *Lacedemonian* *Machanidas* being to confront him, *marcht* up directly opposite to his right wing in form of a *Horse* (by them called *Orthophalanx*) But being come within convenient distance he suddenly causeth the *Reere* half-files to double the front to the right intire, thereby equalizing the left wing of the *Achaians*. The manner or way to perform the motion, is this. The half-files face to the left, and march till they are quite cleere of that part of the body, which stands; then they face to their Leader, and so march up, untill they are become even in rank with those which stand upon the right flank: and then the Figure will be perfect. For the reducement; the word of Command is, *Half Files face about to the right, march forth into your places*: having faced about, they march straight forth, untill they be cleere of the front half files; then they face to the left, and march straight forth, untill every man hath his right place, and then face right after their Leaders. The doubling of half files to the right intire, is performed after the same manner, onely differing in the hand.

*Polybius lib 1. p. 631. B. as also*  
*Alian* in his  
*Tacticks*, the  
notes of the  
32. cap.

The direction  
for this doubling  
of half-  
files intire.

The word of  
Command and  
reducement of  
this doubling.



## CHAP. XXII.

*Of doubling the Front inward intire.*

Doubling of the *Front inward intire*, hath been a doubling as usefull, as ancient: notwithstanding, most commonly used by greater bodies, as when one Regiment, Division; or Maniple, moveth forward, between two others, thereby seconding or relieving them: whereby the *Front* of all the three divisions become ranged in an even line; but I have onely taken upon me, to shew the motion, in a private Company. The Figure whereof followeth, as it is in the execution.

The Command is,

*Half-files, double your front inward intire.*

The Direction is,

*Front half-files face to the right and left, and March, stand, and face to your Leader.*

*Reere half-file, march up and even your front.*

Front.

16 15 14 13 12 11 10 9  
m m m m p p p p  
m m m m p p p p  
m m m m p p p p  
m m m m p p p p

8 7 6 5 4 3 2 1  
p p p p m m m m 1  
p p p p m m m m 2  
p p p p m m m m 3  
p p p p m m m m 4

The halfe Files in Motion.

m m m m p p p p p p p p m m m m 5  
m m m m p p p p p p p p m m m m 6  
m m m m p p p p p p p p m m m m 7  
m m m m p p p p p p p p m m m m 8

Reere.

*Half-files, face about, and march. Front half-files close your division. Face all to your Leader.*

It

It hath been the custome amongst ancient Soldiers and great Commanders, that in the matter of *Exercise* they shew some things which are most apt for a *private Company*, some for a *Regiment*, other some most usefull for compleat *armes*: so in like manner, it must bee the discretion of every Reader, (whether hee reade for *apprehension* or *reprehension*) to suit and fit each motion to his true end and purpose, and with the wise man, *rather reade twice, then judge once*; and then perhaps, when the intent of the Author is *perceived*, his opinions may be *received*; yet what need I, or any other apologize ought in the behalfe of this *Figure*, or any other such like; sith they are but the expressions of the *various figures* which proceed of the words of Command, used almost by every ordinarie *Exerciser of a Foot Company*? Neverthelesse, if *Aesops* long-ear'd beast passing by should peep into this *Druggists shop*, and quarrell with the Compounds, I shall not study for a further answer, than *That the excellent and skilfull Physician can convert the into an Antidote, which the unlearned foole will make his poyson*. But least I be tax'd for digression, the Motion of this Doubling is thus performed.

The halfe files of the front faceth to the right and left, and march till they have left a distance betweene them sufficient to receive halfe files of the Reere, then stand and face to their Leader. Then the halfe files march up, and even their front. For the reducement of this Figure, there are (as for all the rest) divers waies. But because that it is necessarie to shew one, let the halfe files face about to the reere, and march untill they are cleere of the front halfe files,

The manner or way how this doubling ought to be performed.

The Reducement.

F

then

then cause them to stand and face to their Leader; that being performed, command the front half files to close their divisions, and they are rightly reduced as at first.

### CHAP. XXIII.

*Of Halfe files doubling the front by division.*



His doubling hath been very wel approved of by Count Mansfield, Sir Thomas Kelly, Captain Bingham, and divers other moderne Souldiers of good esteeme, who prefer these sorts of doublings before any other; because these doublings may be used in time of fight, without disturbance to the other part of the Battell. The Figure stands as it is in Motion.

*The Command is, Halfe-files double your front by division.*

*The Direction is, Half-files face to the right and left and March. Stand: Face to your Leader. March up and even your front.*

*Front.*

	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1									
	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m	1								
	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m	2								
Halfe files of the	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m	3								
left flank.	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m	4								
	p	p	p	p	m	m	m	m	.	.	.	.	.	.	.	.	m	m	m	m	p	p	p	p	5
	p	p	p	p	m	m	m	m	.	.	.	.	.	.	.	.	m	m	m	m	p	p	p	p	6
	p	p	p	p	m	m	m	m	.	.	.	.	.	.	.	.	m	m	m	m	p	p	p	p	7
	p	p	p	p	m	m	m	m	.	.	.	.	.	.	.	.	m	m	m	m	p	p	p	p	8

*Reere*

*Halfe-files face about inward. March forth into your places.*

*The*



The way to performe this motion, is as followeth: the *halfe files* are to face to the *right* and *left*, and to march, untill they are cleere of the Reere part of the *Front division*; then they face to their Leader, and march up, untill they become even in ranke with the *front*, and so stand: which perfects this *doubling*. The way to reduce them is as followeth. The *halfe files* are to face about to the *Reere*, and to march forth-right, untill they are cleere of the *front halfe files*; and then they are to face to the *right* and *left* inward; and so to march and close their *division*: then being faced to their Leader, they are reduced as at first.

The manner or way how this doubling ought to be performed.

The Reduction.

## CHAP. XXIV.

### Of doubling the Reere, by division.



His next doubling shall be a doubling of the *Reere* by the *front halfe files*, which will work the same effect to the *reere*, as the last doubling by *division* did to the *front*. It may be usefull in the passing of a River, when the enemy chargeth or pursueth in the *Reere*. The *front division* either opening, as you may perceive by the Figure (next following) and suffering the *reere halfe files* to passe through them, they maintaining the *skirmish*, untill the other have attained the fur-

The motion  
advantagious  
for the streng-  
thening of the  
reere.

ther banke of the river; or else the *Front halfe-files* being opened to the *right* and *left*, and faced upon the *Enemy*; March gallantly up, and receive the *Charge*, whilest the others provide for themselves. This Motion may also be usefull, when you have gained some place of advantage, For then by this *Doubling of the Reere*, your battaile will bee both *lengthned* and *strengthened*; And so by the suddain bringing of these Supplies into the *reere*, you may not onely relieve your owne, but happily *over-front* your enemy. The Figure followeth.

The Command is, *Front halfe-files, double your Reere by division.*

The Direction is, *Front halfe-files, Face to the right and left, and march. When they are cleere of the standing part of the Body, face to the reere and move downe even with the reere.*

This was the Front before the  
Motion begunne.

```

. . . . .
. . . . .
uuuu dddd . . . . . dddd uuuu 1
uuuu dddd . . . . . dddd uuuu 2
uuuu dddd mmm pppppppp mmm dddd uuuu 3
uuuu dddd mmm pppppppp mmm dddd uuuu 4
      mmm pppppppp mmm 7
      mmm pppppppp mmm 8

```

*Reere*

*Front halfe-files face about to the right and left, inward.  
March forth into your places.*

For

The Motion may be thus performed : The *Front half-files Face* to the *right* and *left*, and *march* untill they are cleere of the other *half-files* of the *Reere*; Then they *Face* to the *Reere*, and *March* on, untill they have attained to be *even* in *Rank* with them, whom they had *Command* to *double*; which perfects the *Doubling*. The way to *reduce* them, is as followeth : If you keep your place of the first *Front*, Then let your *Half files face about*, (according to former directions,) and *March untill they are cleere of the Reere Half-files*, which stand; Then *Face* to the *Right* and *Left inward*, and close their *Divisions*; So being *Faced* all to their *Leader*, they are *Reduced*. Sundry, and divers wayes there are for *Reducement* both of this and most other *Figures*. Neverthelesse I conceive, if I give one *Reducement* to each *Figure*, it may suffice to those that know little; As for such which know better, they know more wayes to the *Wood* then one: And surely, should I inlarge my self, but half so much as I might, (and indeed in some things, no more then were needfull) I should then bring my *Volume* into too great a *bulk*; and by the price, hinder some of the profit: But I am willingly silent in some things, whereby others may be the better encouraged by my weaknesse, to take notice of their own *worths*, which may induce them to put *Pen* to *paper*, and thereby produce some *worthy worke*, which may tend to their *Credits*, and their *Countries* good.

Instructions  
how to per-  
form this  
doubling.

The Reduce-  
ment.

The curious  
may find many  
wayes of  
Reducement.



## CHAP. XXV.

*Of Doubling the Reere intire, by the  
Front-half-files.*



His next *doubling*, shall be a *doubling* of the *Reere* to the *Right intire*, by the *Front half-files*; which I intend not fully to expresse: But to deliver the *Figure* as the *Body* stands in *Motion*. For I conceive it better to shew some *Figures* in the manner of the *Motion*, then to shew them as they would appeare. The *Motion* being perfected: for the way of the working, gives a great deale more light to the Learner, then to shew the thing absolutely wrought. \* Neither would I have any think, although I shew these varieties of *doublings*, and acknowledge them to be of singular good use for the extension of the *length* or *depth* of any *Battaile*; but that the wise conduct and skill of the Commander must so order them, that the *extending* of the *length*, do not too much *weaken* the *depth*; nor that the *strengthening* of the *depth*, be not too great a *weakening* to the *Front* or *length* of your *Battaile*. I might give examples how divers great Commanders, either by good foresight, or ill oversight, have gained to *themselves* and their *Countries honour* and *victory*, or *losse* and *slavery*. But others have been very plentifull in examples of this nature, which makes me the more sparing: For my intent is not to write a *History* of the  
actions

The Command is,  
*Front-half-files, double your Reere to the right entire.*

The Direction is,  
*Front-half-files, face to the left and march. Stand and  
 face all to the Reere of the Battell.  
 March, and Rank even with the Reere.*

## The Front half-files in Motion,

[illegible]

Reere:

*Front-half files, face about to the Left. March forth  
into your places.*

Next the  
Motion.

The manner of this motion (or doubling) is thus to be performed. The *Front-half-files*, *Face* to the *Left*; and *March* untill they are cleere of the *Reere-half-files*; Then *Face* againe to the *Left* (which is the *Reere*) and *March* outright, untill they *Rank even* with the *last rank* of the *Reere-division*; which gives conclusion to the *Doubling*.

The Reducement.

For the *reducement*. Let your *Front-half-files*, *Face about* to the *Left*; and *March* right forth untill they are cleere of the *Reere-half-files*; Then *Face* them to the *Right*, and let them *March* into their places. Then if the *Commander* go to his first *Front*, and *Face* them all to him; they are *reduced* as at first. To *double* the *Reere* to the *Left intire*, may be done after the same manner: onely differing in the hand.

## CHAP. XXVI.

*Of doublings by Half-rankes intire.*



A doubling of  
Number and  
Place.

Having shewed the *Particle-doublings* and the *Doublings* of *Front* and *Reere intire*, and by *division*: I will next shew the *doublings* of *Flanks* after the same manner. And will first begin with a *doubling* of the *left Flank*, by advancing the *right Flank*; and placing it before the *Leaders* of the *left Flank*: which is a *doubling* both of *Number* and *Place*, and may serve to singular



gular good use for the strengthening of any flank, where it may be needfull: For it makes the *Battle* defensible on every part. The *Figure*, as it is in *Motion* followeth.

The Command is,

*Right flank, double your left flank intire advancing.*

The Direction is,

*Right flank March, Stand, face to the left, and March, even with the left flank.*

*Face all to your Leader.*

Front of the Right flank.

p p p p m m m m  
p p p p m m m m  
p p p p m m m m  
p p p p m m m m  
p p p p m m m m  
p p p p m m m m  
p p p p m m m m  
p p p p m m m m

*Right Flank.*

Front.

m m m m p p p p  
m m m m p p p p  
m m m m p p p p  
m m m m p p p p  
m m m m p p p p  
m m m m p p p p  
m m m m p p p p  
m m m m p p p p

*Left Flank.*

Reere.

*Right flank that doubled, face about to the left, March forth into your places.*

This reduction conceives the whole Body faced to the Left flank. If they face to the proper front; then Right flank that doubled face to the Right, March forth into your places.

If

If you would have your *Muskettiers*, to double even, with the *Muskettiers* of the *contrary Flank*; Then it is no more but thus. Cause the *half Ranks* of the *right Flank*, to march forth-right (as you may perceive by the *Figure*) untill the *Reere Rank* of the *right Flank*, be advanced about three foot before the *Front* of the *left Flank*; then cause that *Flank* so advanced, to *Counter-march* their *Ranks* to the *right*. And then all your *Muskettiers* will be together on the *left flank*; the *Pikes* likewise by themselves on the *right flank*. If this be performed, then the *reducement* must be answerable after the same manner.

For Instruction how the motion of this Doubling ought to be performed (according to the words of Command and Direction formerly given) is as followeth. The *Left flank* (or *Half-ranks* of the left) stands fast: the *right flank* both *Muskettiers* and *Pikes* March forth-right untill the *Reere* of the *right Flanke* be advanced before the *Front* of the *left Flanke*, as aforesaid. Then face them to the *left*; and cause them to march, untill the *Pikes* are even in Rank with the *Muskettiers*, then face to their *Leader*, and the doubling is perfit.

Reducement,

For the *Reducement* let the *right flank* that doubled face to the *right*, and march untill they are cleere of the *left flank* (or standing part of the *Battalia*) Then cause them to face again to the *right*, and march straight down into their places. Lastly being faced to the *first front*, they are rightly reduced. The *right flank* may also face about, and double

double the *left flank* towards the *Reere*, both (for Manner of Figure) work one and the same effect, differing onely in Circumstance, the one being a *doubling advancing forwards* before the *front*; the other a *doubling of the depth* towards the *Reere*.

The *left flank* may double the *right flank* intire, either to the *Front* or *Reere*; but by this that hath already been showne, the others may be understood; wherefore I spare the Figures.

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## CHAP. XXVII.

### *Of doubling flanks by division.*



His next *doubling*, is a *doubling of flanks by division*. And without question, a serviceable *doubling*, and very usefull, for some occasions. For if you note the *figure*, and conceive rightly what it will produce, (the *motion* being ended) it makes a strong forme of *Battaile*, to give fire three severall wayes at once. The *figure* followeth.

The

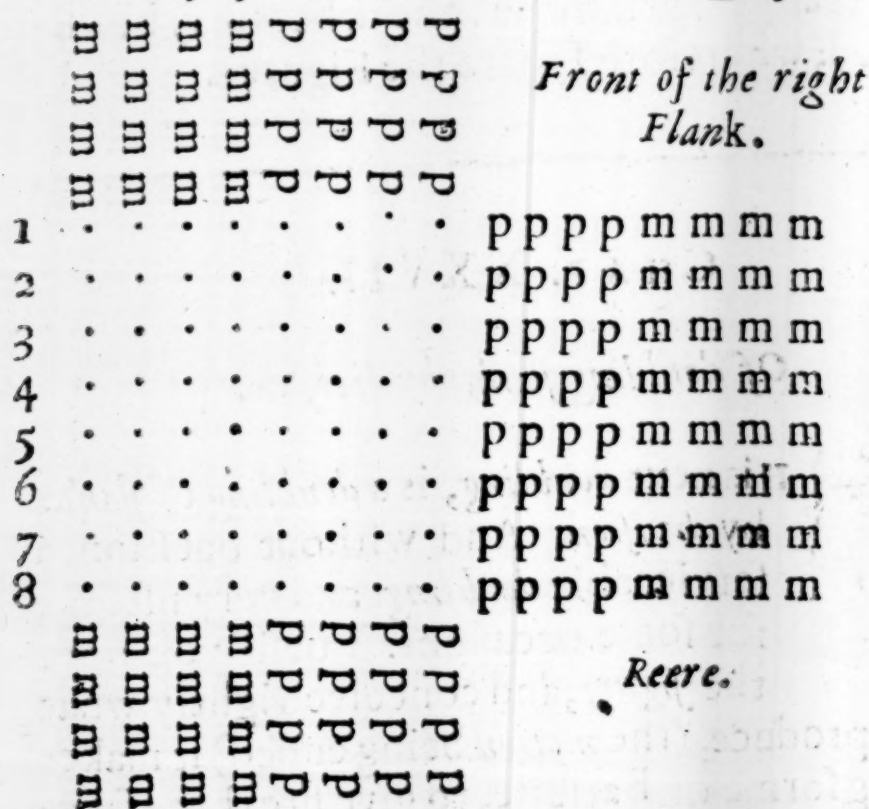


The Command is,

*Left flanke double your right flank by division.*

The Direction is,

*Halfe files of the left flank face to the reere: front and reere half ranks move cleere of the Body, and stand. Front half files face to the right, and reere halfe files to the left; and move even with the right flank.*



*Right flank.*

*Halfe rankes that doubled, face about inward.  
March forth into your places.*

Note the  
Instruction.

The motion of this doubling, is thus to be performed. The reere-half files of the left flank, face about to the right: and then both the front-half-files and reere-half-files march forth-right; untill they are cleere of that part of the body, that stands: then each division faceth that way, which they are to double,

double, (which the *Front-half-files* must do to the right, the *Reere-half-files*, to the left.) And so march forth-right, untill the *doubling* be performed. For the *Reducement*; you are to conceive, it may be diversly performed: If the *Leader*, be at the *right flank*, (which is the part that was *doubled*:) Then, the *Reducement* is, as followeth: The *half-ranks* that doubled, *face about, inward*; and march forth-right untill they are cleere of the *right flank*, which stands; then, the *Front half files*, *face to the left*: the *Reere half files* to the *right*, and then close their *division*. The *Leader* going to his *first front*, and facing the whole body to him, they are reduced as at first: If that the *right flank* would double the *left flank* by *division*; the matter is the same: differing onely in the *hand*.

## CHAP. XXVIII.

### Of doubling Ranks intire.

**D**oubling of ranks to the right intire, is a doubling, both of Number, and Place: and in some sort, worketh the same effect; as the doubling of half files to the right intire. But differeth first in regard of the parties; which are the *doublers*, and secondly, in the *distance*, left after the *doubling*. For the first, (which is matter of *dignity*. The *first* and *first* in honour, are ranked together in the *front*, the *second* and *sixt* in dignity, make

Note the difference of dignity in this doubling.

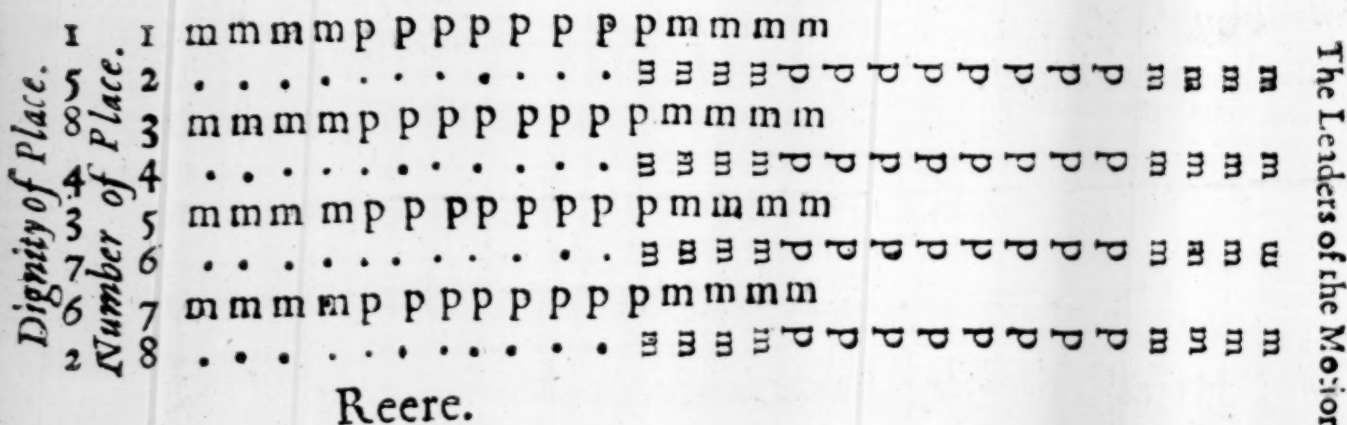
Differing from doubling by half-files in distance.

make the *last ranke* in the *Reere* : So that the *front* precedes the *reere*  $\frac{1}{2}$  in worth : whereas, in the *doubling* by *half files*, the *front* exceeded the *reere*, by  $\frac{1}{2}$ . Secondly, it differeth for the *distance* ; by leaving *open order*, at the least, between all the *ranks*. For further satisfaction, observe this *figure* following.

The Command is,  
*Double your Ranks to the right intire.*

The Direction is,  
*Even Ranks face to the right and March : face to your Leader ; and rank even with the odde.*

Front.



Reere.

*Ranks that doubled, face to the left. March forth into your places.*

Instructions for the Doubling.

The *motion* of this *doubling*, ought to be performed, as followeth, namely, if the *doubling* be to the *right*, as is above expressed by this *figure* : Every *even rank*, *faceth* to the *right*. The *right hand man* of each *rank*, becoming the *leader* of his *ranke* *file-wise* : *leading* them forth, and in their *march* or *moving forwards*, a little *bending* to the *left* : that



that when the *lefthand man* of each Rank, (which are the *bringers up* of the *motion*) are cleere of the *standing* part of the *body*, by onely *facing* to the *front*, they may stand even in *rank* with the rest of the *Company*.

For *reducement* of this *doubling*: it may bee as followeth. Command the ranks that *doubled*, to *face* to the left, and march forth-right into their places. Or for variety, command *half-ranks* of the *right*, to *face* to the *left*, and *double* the *left flanke*. Both which, as the *Company* now stand, work one and the same effect. The *lefthand men* of each *rank*, being the *leaders* of the *motion* in the *reducement*. To *double* *rankes* to the *left intire*, is to bee done after the same manner; onely observing the *difference* of the *band*. This *doubling* may also be done by *division*. But I spare the *Figures*.

Note that the left hand men are the Leaders of the motion, in the Reducement.

## CHAP. XXIX.

*Of doubling files intire, advancing.*



*D*oubling of files to the *right intire* advancing, is (also) a *doubling* both of *number* and *place*: for it increaseth the *depth*, to *double* their *former proportion*: of *number*, as from *eight*, to *sixteene*; from *ten* to *twenty*, &c.

It also gaineth so much more *ground* before the *front*, as formerly the *Battell* did containe: by *transferring* the *even files* of the *body*, into the *ground*, before the *front* of the *odde files*: but this *doubling* *diminsheth* the *number* of the *length* of your

your *battell*, although it preserves their *place*. I spare to speak further of it, onely thus. Let the antiquity of this *doubling* plead for it's excellencie, and if that may hold for a rule, then this may be ranked amongst the best. For further directions, observe the following Figure.

The Command is, *Double your files to the right in-  
tire, advancing.*

The Direction is, *Even files advance forwards, and place your selves before the odde files to the right.*

*Front.*

*Left Flank.*

**Right Flank.**

16	14	12	10	8	6	4	2	
m	m	p	p	p	p	m	m	
m	m	p	p	p	p	m	m	
m	m	p	p	p	p	m	m	
m	m	p	p	p	p	m	m	
m	m	p	p	p	p	m	m	
m	m	p	p	p	p	m	m	
m	m	p	p	p	p	m	m	
m	m	p	p	p	p	m	m	
m	m	p	p	p	p	m	m	
16m	14m	12p	10p	8p	6p	4m	2m	1
• m	• m	• p	• p	• p	• p	• m	• m	2
• m	• m	• p	• p	• p	• p	• m	• m	3
• m	• m	• p	• p	• p	• p	• m	• m	4
• m	• m	• p	• p	• p	• p	• m	• m	5
• m	• m	• p	• p	• p	• p	• m	• m	6
• m	• m	• p	• p	• p	• p	• m	• m	7
• m	• m	• p	• p	• p	• p	• m	• m	8

*Reere.*

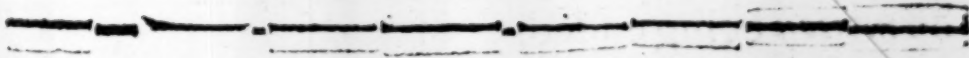
*Files that doubled face about to the left. March  
forth into your places.*

# The

The *motion* of this *doubling* ought to be performed after this manner. The *odde files* are to stand, beginning your account from the *outmost file* to the *hand* named. The *Muskettiers* and *Pikes* of the *even files*, are to *advance* their *Armes*, and follow their *file-leaders*, every *file-leader* leading his *file* forth right; before his *next file* to the right untill the *bringers up* of the *even files*, are orderly placed, before the *leaders* of the *odde files*: as you may perceive by the Figure. For *reducement*: let the *files* that *doubled* face about to the *left*: the *bringers up* of each *file* leading them forth, right downe the *Intervales*, which are on the *left hand*, untill they are come *even* with the *Reere*: and then stand, and face to their *leader*, and they are *reduced*, as at first. The *doubling* of *files* to the *left intire*, advancing; is after the same manner: It onely differeth in the *hand*: wherfore I spare the *figure*. They that love to be curious, may likewise *double files*, by *division*, *advancing*.

Instructions  
to per-orme  
the doubling.

The Reduce-  
ment.





## CHAP. XXX.

## Of Files doubling their depth.



His next *doubling*, is a *doubling* of the depth to the right intire: and is likewise a *doubling* of files, as the other last, shewn in the precedent Chapter. Being alike both for *number* and *place*: notwithstanding it *differeth* from the other both in *manner* of executing, and in some sort of the *matter* executed. For whereas the other *doubling*, by *advancing* of files, did *transfer* all the *even* files into the ground before the Front. Contrariwise, this *doubling* doth *transfere* them into the ground next behind the *Reere*. And as in the other *doubling*, you may perceive halfe the *file-leaders*, to remaine in the *front*; the other halfe to be *half-file leaders*. This *doubling* hath halfe the *file-leaders* in the *front*, the other halfe being the last *ranke* of the *reere*: those which were the former *Bringers up* being become the two *innermost* or *middlemost* ranks. The figure followeth, being demonstrated as the *body* stands: the *motion* being ended.

The

The Command is, *Piles double your depth to the Right: every man falling behind his Bringer up.*

The Direction is, *Even files from the right face to the Reere, and every man place himself after his bringer up Front.*

	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	m	m	p	p	p	p	p	m	m	1							
	m	m	p	p	p	p	p	m	m	2							
	m	m	p	p	p	p	p	m	m	3							
	m	m	p	p	p	p	p	m	m	4							
	m	m	p	p	p	p	p	m	m	5							
	m	m	p	p	p	p	p	m	m	6							
	m	m	p	p	p	p	p	m	m	7							
	m	m	p	p	p	p	p	m	m	8							
Left Flank.	m	m	p	p	p	p	p	m	m	8							
	m	m	p	p	p	p	p	m	m	7							
	m	m	p	p	p	p	p	m	m	6							
	m	m	p	p	p	p	p	m	m	5							
	m	m	p	p	p	p	p	m	m	4							
	m	m	p	p	p	p	p	m	m	3							
	m	m	p	p	p	p	p	m	m	2							
	m	m	p	p	p	p	p	m	m	1							

Right Flank.

Reere.

*Files as you were.*

or

*Bringers up double your Ranks forward to the Left.*

The manner of the motion for this doubling, is as followeth. The command being given, *files, double your depth to the right intire, every man falling behind his bringer up: then the even files accounting from the hand named immediately face about to the right, and the bringers up of each of the even files,*

The manner or way how this doubling ought to be performed.

Reducement.

*files*, turn behinde the *Bringers up* of the *odde files*, that *stand*. And so every man, as hee commeth down to the *reere*, turneth to the *left* behind him; that *marcheth* downe the next before him, untill those that were the *leaders* to the *even files* are become the *bringers up* to those which were the *odd files*. The *reducement* is as followeth. *Bringers up that now are, double your ranks forward to the left*. Which being performed, they are as at the first. If you would bee instructed in the manner, turne back and see it; where the *bringers up* double their *ranks* forward into the *front*. It is the fourteenth Chapter.

Some doublings omitted

I have willingly past over another *doubling* of the *depth*, because it is much after the manner of that which is done by *advancing file upon file*; which is the *doubling* of the last Chapter. It differeth only thus. In the last *figure*, the *even files* *marched* forth, placing themselves before the *odd files*. And in this which I have omitted, the *even files* are to *face about*, and *march* forth right towards the *reere*; untill the *file-leaders* of the *even files* have placed themselves just behind the *bringers up* of the *odde files*: and then every man to face to his *leader*.

Doubling the depth by Counter-march.

Some have a *doubling* of the *depth* by *counter-march*. Which I conceive scarce worth penning, yet willing to leave every man to his owne liking; and as I doe nothing in it, so I'll say nothing of it.

Doubling of place.

There are others that have written concerning *doublings* of *place*; neverthelesse, because they are nothing but the *opening* of *ranks* and *files*, whereby the *length* or *depth* of your *battell* is *extended*, and so  
doubled



*doubled in place, and not in number. I forbear to write further of them, desiring not to treat of such things as are more curious than necessarie.*

# CHAP. XXXI.

*Of Conversion and Inversion, with their words of Command, and Reducements.*



According to my promise, I will now shew the difference between *Inversion* and *Conversion*: whose very names are so intricate and troublesome (to many) that they are more puzzled with the words, than the work. Some are of opinion, that they are both one; differing in *letter*, not in *matter*. Others would have a difference, if they could tell how, or where. But generally, they are so chopt and changed one for the other, that the *Souldier* cannot in truth tell which is either. But that you may not be deceived, take this for a *rule*; that *Inversion* doth alwayes produce *file* or *files*; and *Conversion*, *ranke* or *ranks*. *Inversion* consists of *files filing*, or of *rankes filing*. *Conversion*, of *ranks ranking* to the *right* or *left*. Or by *increase* of *files*, *ranking* by *even* or *uneven* parts: and of *ranks wheeling* to the *right* or *left*. I shall speak further of them in their severall places. But by the way, you are to observe, that *Inversion* & *Conversion* require larger *distances of ground*, than any other *motions*; which must be the *Officers* care to open the *ranks* or *files* to such *distance* as shall be necessary to con-

tain the ranks or files so to be *Inverted* or *Converted*, whether it be double distance, or twice double distance, or any other lesser or larger quantity of ground. The words of *Command*, with their severall *reduncements*, are as followeth.

## Inversion.

## Inversion.

Files, file to the  $\left\{ \begin{array}{l} \text{Right,} \\ \text{Left,} \end{array} \right\}$   $\left\{ \begin{array}{l} \text{File-leaders, leade up your} \\ \text{files as you were.} \end{array} \right\}$   
 Files, file to the *right* and  $\left\{ \begin{array}{l} \text{left by division} \end{array} \right\}$   
 Ranks, file to the  $\left\{ \begin{array}{l} \text{Right,} \\ \text{Left,} \\ \text{Right, and left.} \end{array} \right\}$   $\left\{ \begin{array}{l} \text{Files, ranke as} \\ \text{you were.} \end{array} \right\}$

## Conversion.

## Conversion.

$\left\{ \begin{array}{l} \text{Ranks,} \\ \text{ranke} \end{array} \right\} \left\{ \begin{array}{l} \text{3, 5, 7, or 9, to the right} \\ \text{4, 6, 8, or 10, to the left} \\ \text{By increase 2, 4, 6, 8, \&c. to the right} \\ \text{By increase 1, 3, 5, 7, \&c. to the left} \\ \text{Intire to the right into the front} \\ \text{Intire to the left into the front} \\ \text{By division into the front} \end{array} \right\} \left\{ \begin{array}{l} \text{Ranks, rank} \\ \text{as you were.} \end{array} \right\}$   
 Ranks, wheele to the  $\left\{ \begin{array}{l} \text{Right} \\ \text{Left} \\ \text{Right and left} \end{array} \right\}$   
 $\left\{ \begin{array}{l} \text{Files ranke} \end{array} \right\} \left\{ \begin{array}{l} \text{3, 5, 7, or 9, to the right} \\ \text{4, 6, 8, or 10, to the left} \\ \text{By increase (to the right) 1, 3, 5, 7, \&c.} \\ \text{By increase (to the left) 2, 4, 6, 8, \&c.} \\ \text{To the right} \\ \text{To the left} \end{array} \right\} \left\{ \begin{array}{l} \text{Ranks} \\ \text{file as} \\ \text{you were.} \end{array} \right\}$   
 To the front.

To

To avoid the words of *Inversion* and *Conversion*, I have delivered the directions without naming either of them. Only I have exprest the *sixe* first words of *Command* to bee *Inversion*; and the last *sixteene* to be *Conversion*. For I conceive it altogether unnecessary to adde to every word of *Command*, *Inversion*, or *Conversion*. For by so doing, the unlearned and ignorant *Souldier* will bee so confused with the strangenesse of the word, that he will scarce by any meanes be made capable of the matter. For my owne part, I have ever held this opinion; that the easiest expressions are ever to be preferred, in the way of instruction, to young *Souldiers*. I might have much enlarged my selfe, in the words of direction, concerning this subject, and have written concerning *Ranks* and *Files*; *ranking* by *decrease*: but these already exprest, may suffice, to demonstrate to any the grounds of all: and if any will be curious, by the practice of these the rest will be found. I also at first intended to have drawn a *figure*, the more lively to have exprest thereby each severall word of *command*, but upon better consideration, I perceived that some of them would require much roome, and not be so apt to print, without their *figures* were cut; and were facile enough to the meanest capacity, by their words of *Command* and *direction*. Therefore I conceive the paines and cost may bee spared, delivering the *figures* of some few of them, that are *most necessarie*; and for the rest, expresse by word what they will produce in *figure*.



## CHAP. XXXII.

*Of Files, filing in sequence.*

The Command is,

*Files, file to the right.*

Inversion.



O performe this word of Command, or Direction. The right hand file marcheth away single; the second file from the right falleth into the reere of the first. The third, behind the second; the fourth, behind the third. And so consequently, all the rest of the files fall into the reere of their next right-hand-files, untill all the whole Company become one file. It may bee usefull to passe some narrow bridge, or thicket, or elsewhere, where bur one at once can passe; the Commander being willing to preserve his files intire and whole. The way for the *reducement* may be after this manner. (The place being convenient) every file-leader is to lead up his file to the left of him that marcheth before him, untill all the file-leaders are even in ranke together: their files orderly following them. The word for the *reducement*; is, *File-leaders, Lead up your files as you were.* For files, to file on in sequence, to the left; may be performed, after the same manner:

ner: it onely differeth in the *hand*. But works the same effect; onely, the *right-hand file leader*, led the *other*: and the *left-hand file*, fell last of all into the *Reere*. This, contrariwise, is led forth by the *left-hand-file*, and the *right-hand-file*, is the last, that taketh place, in the *Reere* of the *extended file*.

*Files, file to the Right and Left by  
Division.*

*Files filing by division*, is wrought after the same manner: but differeth in this; That the *right-hand-file* of the *Company*, and the *left-hand file* of the same, begin to lead forth at one, and the same time in their severall places. The files of the *right flank* falling likewise, behind the *right-hand file*: the files of the *left flank*, falling in like manner, behind the *left-hand-file*. So, that if the body be flankt with *Muskettiers*; then this *filing by division*, bringeth all the *Muskettiers* into the *front-division*: and the *Pikes* in the *reere* of them. If there be an *odde file*, it most commonly falleth to the *right*. The word for *reducement* is; *file-leaders*, lead up your files as you were. This sort of *Inversion*, is called *filing in sequence*. I will now shew another sort of *Inversion*, which is by *rank filing*. The which I will demonstrate unto you, by two *figures*, which will be sufficient to instruct the desirous.

## CHAP. XXXIII.

*Of inverting ranks; or ranks filing.*



His following figure of *Inversion*, is of ranks, *filing to the right*; where all the ranks are to be inverted into the out-most file to the right; For the doing whereof let all your files be closed to their order, or close order; as shall be thought most necessary; the ranks opened, either forward, or backward to double-distance, or twice double distance, (more or lesse) as the *Commander* shall see most convenient, according to his number. Having closed your files, and opened your ranks, unto their due distance; then let every rank move after his *right hand-man*, untill every rank stand right in file, after the *right hand-leader* of his rank. In this Figure I have onely opened the *four first ranks* to their distance, and inverted but two of the *four*. By which it may easily be perceived, both the manner of the work, and the matter which is to be wrought. But if the *Commander* will perform it upon a *March*; then they shall not need to open to any distance, but to take their distance, in the execution: which is the easiest way, and will be thus performed. The *right hand man* of the *first rank*, marcheth forth right; all his rank facing to the right, and marching file-wise after him. The *right-hand-*

This kind of  
Inversion best  
performed  
Marching.



cond; his *ranke* likewise following of him. And so for all the rest, untill they are all become one *file*.



m m p p p p m m 4

This *Ranke* filing, is sooner performed, and reduced, than *files* filing: and in the *Reducement* will presently bee ready to make resistance, against any opposition in the *Front*. Whereas if *Files* file, it will be a great while before the *File-leaders* will be able to make

m m p p p p m m 5.  
m m p p p p m m 6.  
m m p p p p m m 7.  
m m p p p p m m 8.

*Reere.*

*Files, ranke as ye were,*

*good*

Place this Figure in Chap. 33 betweene fol. 90. and 91.

This kind  
Inverio  
performi  
Marchi

-----, *the drum,*  
marcheth forth right; all his ranke facing to the  
right, and marching file-wise after him. The right-  
hand-

good the *Front* : the manner of the *Reduement* of <sup>The Reduement.</sup> this figure, is as followeth. If they were *eight* men, before in *rank*, then the first *eight* men, *rank* to the *left*, into the *front*. The next *eight* men *rank* next after them, which makes the second *rank*. The third *eight* men, *ranking* to the *left*, make the third *rank*. And so forward for the rest, untill they are *reduced*, as at the first. But it may be, that some will object; that in this figure there is *mixture* of *Armes*; which if they will avoyd, they may either *March* forwards their *Muskettiers* of each *division*, and *close* them before the *Pikes*; and *invert* them first. Or they may *March* forwards their *Pikes* first, and leave their *Muskettiers* to come in the *reere*. Or if they please, they may upon a deep *March*, first *invert* the *front-division* of *Muskettiers*: <sup>Mixture of Armes hath many times proved advantageous.</sup> then their *Pikes*, and last the *reere-division* of *Muskettiers*; which way soever it be done. The word <sup>By this deep March is to be understood a right induction according to Alian.</sup> for the *reduement* will be, *files*, *ranke* as you were.

*Ranks*, *file* to the *Left*, is performed after the <sup>Ranks, files to the left.</sup> same manner. It *differeith* from this last done, but only in the *hand*. And whereas the *Right-hand-file-Leader*, was the *Leader* of the last, this would be led by the *left-hand-file-Leader*: The *left-hand-Leader* of each *rank*; leading forth his *ranke*, *file-wise*, as before it was performed; but to the *contrary hand* I spare the figure.



## CHAP. XXXIV.

*Of Ranks filing by division: and how  
usefull.*



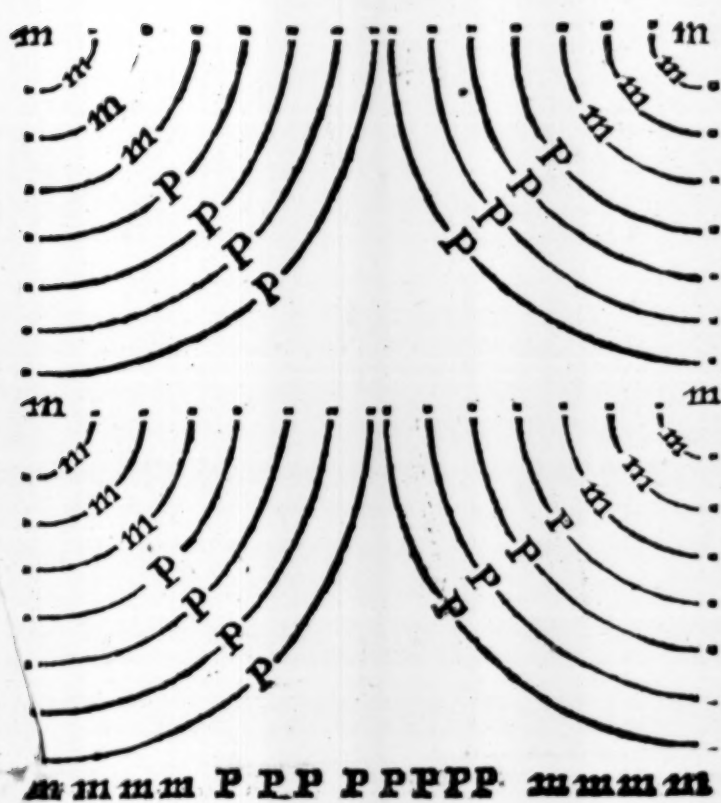
*Tacticks Alian*  
chap. 30. p. 6.  
line the last,

His next figure of *Inversion*, is of Ranks filing by division, and is a doubling of the depth, by unequall proportion. For whereas in most of all other doublings, the Number of the Length, or Depth is augmented, but to double their former proportion of Number: this doubling of *Inversion*, makes their Depth so many times more in number, as there are files to double. Or halfe so many times, if it be done by *Division*, as in the next following figure. It hath been of ancient use, amongst the Grecians: and in these our latter times, it hath been held of speciall use, to avoyd the shot of the great Ordinance, when of necessity we are to march against any *Battery*. It hath also been held good, to prevent the eminent danger of some great shower of small shot, likely to be powred out upon the *Front* of your *Battalia*. It may also serve for a guard Honourable passage, large intervalle, street, or gallery, (as some call it) for any great Personage, or Commander to passe through. It is also of common use, for the lodging of the Colours, or *Ensigne*. And many other such like.

For

*Ranks, file to the right and left by division.*

*Front.*



**m m m m p p p p p p p p m m m m**

**m m m m p p p p p p p p m m m m**  
**m m m m p p p p p p p p m m m m**  
**m m m m p p p p p p p p m m m m**  
**m m m m p p p p p p p p m m m m**

*Rear.*

*Files, ranke as you were.*

*Place this Figure in Chapt. 34. betweene fol. 92. and 93.*

## CHAP. XXXIV.



De

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Per,

so of c

Ensigne.

*Tacticks Alian*  
chap. 30. p. 6.  
line the last,

And many other such are.

For



For Instruction how to perform this *Motion*, It is the same with the last *figure*; differing onely in this; that as in the other *figure*, all the whole *ranks* turned to the *right*, behind their *right-hand-men*: In this *Motion*, the *left-flank*, (or *half-ranks* to the *left*) fall into the outmost *file* to the *left*: the *half-ranks* to the *right*, behind their severall *right-hand-men*: as you may perceive in part by the *figure*. I have shewen the *Figure*, in the manner of the *action*, not fully performed: The *pricks rank-wise*, denoting the places, from whence they came: The *Quarter-circles*, shewing the way of the *motion*: The *pricks file-wise*, directing, or shewing their Places they are going to.

For *reducement* to the *Figure*: it is no more then this. The *Ranks* which before *inverted* into *files*, Reducement by Conversion. now again *convert* into *ranks*, as they were. The word of Command for it, is, *files, rank to the right and left inward, as you were.*

I hope this that hath already been shewen, will be sufficient, (at least in some small measure) to give satisfaction to those, which as yet have not known what is meant by *Inversion*: Yet I could wish, that such as exercise the Companies of the Trained-Bands of this Kingdome; would rather make use of the plainer word of *demonstration*; which is, *Ranks, File, or Files, File*: and leave out the word *Inversion*, as a word not sutable with the Capacity of divers of our Souldiers of the Trained-Bands. Especially of this City, where Porters, Colliers, Water-beares, and Broomemen, are thrust into the rooms of men, of better quality, Military Discipline too much slighted by the middle sort of Citizens.

as though they themselves were too good, to doe the King and their Countrey service.

### CHAP. XXXV.

*Of the severall parts of Conversion : and how they are to be understood.*

**T**He next branch of *Discipline* which I offer to your view, shall be of *Conversion* : and of its severall parts : wherein if there be any that think me tedious ; let them turn it over, and settle on some other part, which may be to them more delectable : whilst I, in the meane time, shall endeavour to give content to all, neither stuffing out my Book with *needleffe discourses* ; nor yet too much abbreviating the *matter*, whereby to render it too obscure unto the commonest capacity. Wherefore take their parts as they hereafter follow.

Conversion consists of these parts, viz. Of	{	Ranks ranking	<i>In equall parts</i>	1
			<i>In unequall parts</i>	2
			<i>Intire into the Front</i>	3
	{	Files ranking	<i>By division into the Front</i>	4
			<i>By wheeling to the Flanks</i>	5
			<i>By equall parts</i>	6
	{		<i>By unequall parts</i>	7
			<i>Intire into the Front.</i>	9

First,



First of ranks ranking, in even or equal parts. Which is to be understood, when there are twelve, or twenty, (more or lesse) marching abreast, and the Commander (either for the narrowness of a passage, or for some other intent) causeth his ranks to ranke three or six abreast, or five, ten, or any other number, either according to the place, or occasion; every ranke holding equality of number.

Ranking in equal parts.

This manner used both by Greeks and Romans, and is the best for a straight.

Secondly, ranks then rank by unequal parts: when they rank by increase or decrease. As when the first ranke shall be three, the next five, then seven, nine, &c. which is commonly used, for the making of Diamond, and Triangular figures.

Ranking in unequal parts

Thirdly; ranks then ranke intire, into the front: when the first rank stands: the second rank placeth it self on the right or left of the first: the third by the second, the fourth by the third, and so forward for all the rest, untill all the ranks, (either to the right or left) according to direction are become one rank in the front.

Ranks ranking intire into the front.

Fourthly, ranks, then rank by division into the front, when the second rank, and all the rest of the ranks behind, open to the right and left: the one part going to the right, the other to the left; ranking even with the first, as before, and altogether making one rank.

Ranks ranking by division into the front

Fifthly, Ranks, then rank to the flank or flanks; when either the right hand man of each rank, or the left hand man (or both together) are as it were the Hinge of the motion, the rest of each rank wheeling about them, to the right or left, or each hand by division, untill that every rank be brought into the distance

Ranks ranking to the flanks by wheeling.



stance, which was before the rank; between the right hand-man, of the rank next before, and the right hand man of the same rank you stand in. If it be to the left, then they wheele into the distance between the left-hand-leaders of each Rank. If it be by division, then half the Rank wheeleth to the right: the other half to the left, and produceth two Ranks.

Files ranking  
in equall  
parts.

Sixthly, *Files* then rank by equall parts: when they rank three, foure, or five abreast (more or lesse) still keeping the number of men in rank, of due proportion. If you rank three abreast (either to the right or left) and your *File* be but eight deep; then the first sixe men make two ranks, the third rank must be made up by the Leader of the *second file*. And so for all the rest. If you rank foure, and the *files* be eight deep, then every *file* makes two ranks. If you rank five, the *files* being 8. deep, then the first five men make a Rank: and the first two men of the second *file* from the *hand* named, make up the *second rank*. Five of the other sixe, make up the *third rank*. And so forward for the rest. If the depth of the *file* were ten men, then it would make two even ranks.

Files ranking  
by unequall  
parts.

Seventhly, *Files* then rank by unequall parts: when they either rank by progressionall increase, or by decrease. As when every rank exceeds the rank before it, by two, three, or foure, be it more or lesse. Or else that each rank decreaseth, after the same manner.

Files ranking  
intire into the  
Front.

Eightly, *Files* then rank intire into the front; when there is so much distance between *file* and *file*, as will contain each *file*, rank-wise: every man in  
the

the file marching forward to the right or left, as shall be commanded, untill hee stand even in ranke with the leader of his file, which brings the Bodie into one ranke.

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CHAP. XXXVI.

*Of Rankes wheeling by Conversion.*



I F I would strive to be *curious*, I should need no other *subject* to lengthen my discourse, but onely this, of *Inversion* and *Conversion*, which of it selfe would yield matter sufficient to make a Book. But I have taken a larger taske: And therefore like the Artists in Geographie, who sometimes by a *spot* presents a *Towne*, and by a *wrinkled line* a large *River*; so must I crave of the favourable Reader, that in this small Treatise of *Discipline* he will not expect that I should enlarge my selfe so amply, as I might, upon every part. For then my Booke would growe beyond his bounds, and beyond my promise; but lest I bee taxed for digression, this that hath already beene shewne may suffice for *Conversion*. But because it may bee expected, that I should shew *Conversion* in *Figure*, as well as the other *Motions*, therefore to satisfie such, I shall demonstrate two

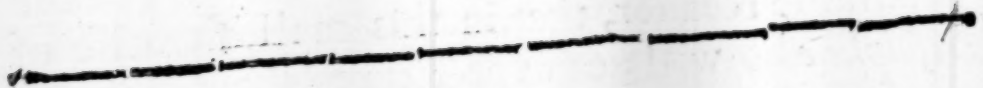
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*Figures,*

Figures unto them: which may serve for all the rest. The one shall bee of *rankes wheeling by Conversion*: the other of *files ranking, foure to the left*. The word of *Command* for the first stands placed right over the figure.

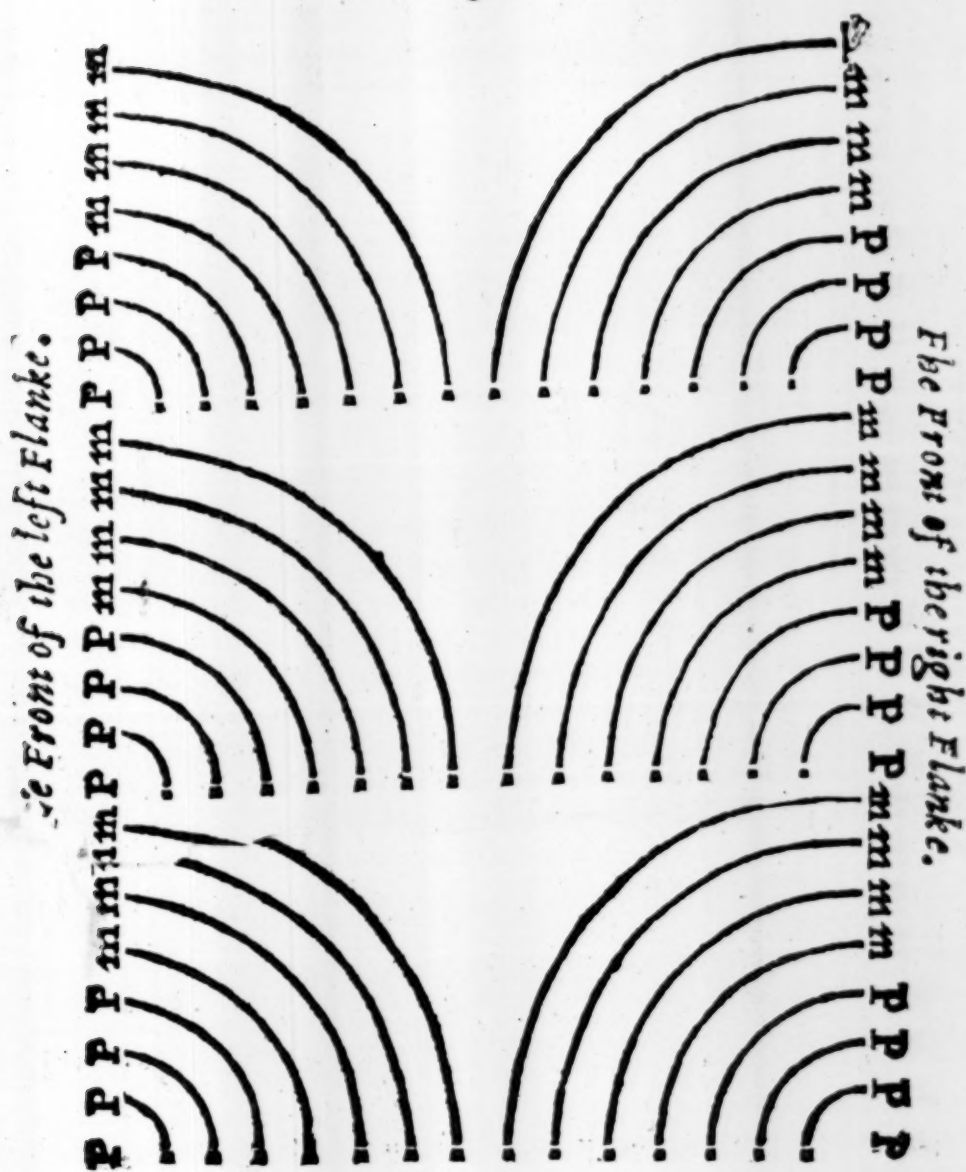


This





Ranks wheele to the right and left by division  
The First Front.



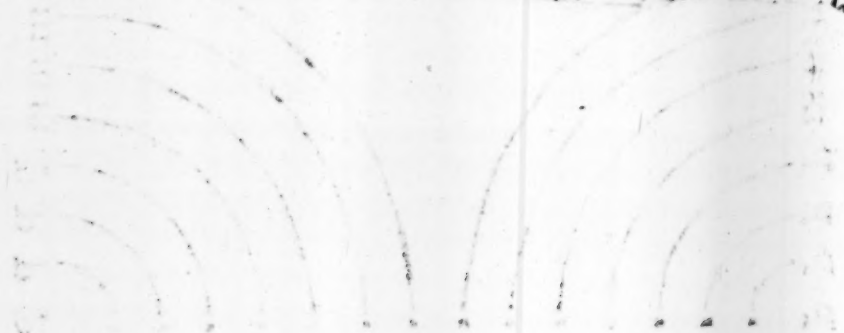
p p p p m m m m m m m m m m p p p p

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p p p p m m m m m m m m m m p p p p

Reere.

Place this figure in Chap. 36. between fol. 98. & 99.

Figures unto them: which may serve for all the  
The one shall bee of *rankes wheeling by Con-*



This foregoing figure of *Conversion* is of *rankes wheeling to the right and left, or ranks ranking to each flank by wheeling*. It differeth from *ranks filing* both in manner and matter. In the manner thus, Whereas in *ranks filing* to the right and left, the *right and left hand file-leaders* preserve and continue their places; and with that, their honours. In this *wheeling by Conversion to the right and left*, contrariwise: the *innermost file-leaders* become the *outmost* men in that part where the *front* stood; the other *file leaders* *ranking even* within them. Some men have called this, *Rankes, filing by Conversion, to the right and left*, but corruptly. For *conversion* alwaies produceth *rankes*, as I formerly said: and *Inversion, files*. But their mistake groweth from this, that when *Ranks wheele to the right, or right and left*, then (say they) they by *wheeling* become *file, or files*, which is a palpable mistake. For when we have any *command* for *wheeling*, it is a *maxime* for us, to *wheele our aspects unto the hand or part named*, By which doing, we either become *ranke, or rankes*; and not *files*, as some have sought formerly to maintaine. One use, among many, for this *motion* is. It is the speediest way for a great *Body* (if they have their due distance) to *give fire to one, or both flanks*, that as yet I know of. The way to performe this *motion*, is as followeth. The *right and left hand-men* of every *ranke* became the *Hindges* of the *motion*: the rest of each rank *wheeling by equall division* to the right and left about, and above their right and left hand Leaders, untill they become ranks to the flanks; as you may per-

Ranks filing  
by Conversion  
an improper  
word of com-  
mand.



ceive by the Figure, where the *pricks* denote unto you the *places* they stood in before the *motion*: the *quarter circles*, shewing the *way* of their *motion*, themselves being converted into two ranks, sheweth the motion executed. I have onely converted three of the ranks; for it would have taken too much roome, to have wheeled all the ranks. And it is easie by this that is shewne to conceive the rest. If you would avoid mixture of *Armes*, then place all your *Muskettiers*, either in *front* or *Reere*; or else wheele onely your *Muskettiers*, and leave your *Pikes* standing. Or else it may be done, the *body* marching at length; the *Muskettiers* being in the *front* and *reere* divisions. The word for the *reducement* is, *ranks, ranke* as you were.

The easiest way for the *reducement*, will be first for to *face* to the *reere*, and then to *wheele back* into their places. Then, *face* to their *leader*; and they will be reduced as at first. Now we will come to shew the next *figure* of *Conversion*, which is of *files* converted into *ranks* by *equall proportion*.

CHAP.

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## CHAP. XXXVII.

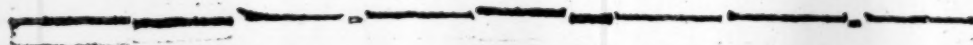
*Of Files ranking in equall parts.*

IN this Chapter I intend to shew the manner of files ranking by *Conversion in equall parts*; which *Motion* I have seene used by some *Commanders*, at such times as their *Companies* have beene but small, having not had above 2. or 3. files of *Muskettiers* upon a *flanke*; and being willing to march forth their *Companies* in *divisions*: And this, because that two a *breſt* would bee somewhat improper (unlesse it were upon necessity, in some narrow *passage*) and that three a *breſt*, is also somewhat with the thinnest. Therefore to augment the front of their march, they have *shortned* somewhat of their *depths*, in each division; by causing their files to *ranke* foure or five, according as their *depth* may be, when the *Command* shall bee given. This *Motion of Conversion* may also be usefull for *larger bodies*. For if upon a *March* you are to passe thorow some *streight*, where not above foure or five can march a *breſt*; and that being past thorow, you are to direct your course to the *right* or *left*: If your way bee to the *right*, then cause your files to *ranke* to the *left*: If to the *left*, then let the files *ranke* to the contrary hand. For by so doing, ha-

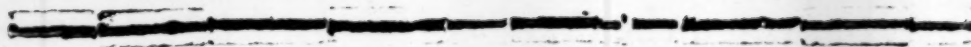
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ving

ving past the *streight*, and faced your *body* that way, which you intend your *March*, by commanding the *file-leaders* to *march*; and the *half-files* to *stand*, and take their places : your *body* will be led again by their *proper file-leaders*, all a *brest*; the *Musketiers* becomming againe the *Flankers*, which in the *Passage* of the *streight* were in the *front* and *reere*. For the better understanding the manner of the *Motion*, observe the following *figure*.



This





Files, ranke foure to the left.

Front.

This was the {

1	File	{	m m m m	f.
		}	m m m m	b.
2	File	{	m m m m	f.
		}	m m m m	b.
3	File	{	m m m m	f.
		}	m m m m	b.
4	File	{	m m m m	f.
		}	m m m m	b.
5	File	{	p p p p	f.
		}	p p p p	b.
6	File	{	p p p p	f.
		}	p p p p	b.
7	File	{	p p p p	f.
		}	p p p p	b.
8	File	{	p p p p	f.
		}	p p p p	b.

9

p f

p

p

p

p

p

p

p

p

p

p

p

p

p

16	15	14	13	12	11	10
m	m	m	m	p	p	p
m	m	m	m	p	p	p
m	m	m	m	p	p	p
m	m	m	m	p	p	p
m	m	m	m	p	p	p
m	m	m	m	p	p	p
m	m	m	m	p	p	p
m	m	m	m	p	p	p

Rere.

Direction for  
Files ranking  
4. to the left.


The way to performe this *Motion*, is as followeth. The *Command* being first given (as above said) the *right hand file-leader* leadeth forth his *file*: and the *three next men* behind him moove forwards to the *left* of each other; untill they *ranke even a brest* with their *file leader*. The next *four* in like manner *ranking to the left*, make the *second ranke*. The *file leader* of the *second file* placeth himself next after him that was the *halfe file leader* of the *first*, which now is become the *right hand man* of the *second ranke*; the *three next men* behind him, making up of his *rank* in like manner. And so forward for all the rest, untill the *Motion* be fully perfected. This converts each *file* into two *ranks*; and brings all the *proper file leaders*, and *halfe file leaders*, to make the *outmost file* to the *right*: the *bringers up* both of the *front* and *reere halfe files*, make the *outermost file* to the *left*. The *figures of Number*, which are on the *left flanke* of the *figure*, in which the word *file* added to each of them, demonstrate *places* of the *first, second, third, and fourth file*, and so consequently for all the rest; according to their *former standing*, and the *places* they now occupie, being converted into *ranks*. The *letters f and h*, which are placed on the *right flank*, shewes the *places* of those which were the *file leaders*, and *halfe file leaders*: each of the *proper file leaders* having now his *halfe file leader* next after him. I have shewnethis *figure* partly performed, partly performing, and partly standing, as before the *Motion* began.

For

For *reducement* of this *Motion* of files ranking, Reducement.  
 foure to the left: One way is, to cause your ranks  
 to file, (or invert) to the right, which being done,  
 Command every File-leader to lead up his File to the  
 left: and so every man will have his place: For A second way  
of Reduce-  
ment.  
 another way, Face the whole body to the right, and  
 command the File-leader to march, and half files to  
 stand, and take their places: and then they are all  
 reduced, onely the file-leaders of the right flank, are  
 on the left; and the file-leaders of the left flank, are  
 on the right: which is reduced, by any entire Cou-  
 termarch, of rank, or file.

## CHAP. XXXVIII.

### *The conclusion of Doublings.*

 Here are yet another sort of *Doublings*, both of length and depth, which  
 are performed by *divisionall wheelings*. Which because they have  
 ever been accounted for *wheelings*,  
 I will not displace them; but still rank them in  
 their former places: although in truth they are  
*doublings*. The *working part* indeed is *wheeling*;  
 but the *intent*, or *thing wrought*, is *Doubling*. I  
 will speak further of them, when I come to shew  
 them



them in their severall places. And here I mean to set a *Period* to our *Doublings*. Concluding, that those *Souldiers*, who can put every one of these to his right use; as also give to each his right reducement; must needs be skilfull, and expert, in this part of the *Art Military*. And contrariwise, they that are ignorant in these *Doublings* can never truly attain to the right managing of a *Foot-company*, either for *exercise*, or *service*. For *doublings*, indeed, are the onely *Motions*, for variety and alteration of figures, or forms of *battaile*: No other *Motions* doing the like. And therefore *Doublings* must needs be accounted the most excellent among all the *Motions*.

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Y<sup>O</sup>u that have eyes to read, and skill to judge;  
 And have perus'd these *Doublings* I have done:  
 Though I have tedious been, yet do not grudge:  
 For you know well, I have skipt over some.  
 But marvell not: the cause I do not show them,  
 It is not much materiall for to know them.

Those that are skilfull in the *Art of Warre*,  
 And take delight to exercise their Men:  
 Shall find more pleasure in these *doublings* farre,  
 If that they intermixe them now and then.  
 And so contrive their *doublings* in these cases,  
 That lastly one word brings them to their places.

why

*Why in our Country do we Captains chuse,  
That have no skill nor artfull inclination?  
They do themselves and Country much abuse:  
Thus to deceive them in their expectation.*

*I think the Cause of this fault in our Nation  
Is, that our Gentry holds not armes in fashion.*

*But some, perhaps, will say, I am too bold;  
There's no such need for Captains to have skill.  
The Muster-masters have enough (some hold)  
The Captains and the Countries for to fill.  
So whilst the Muster-master doth the labour,  
The Officers may play upon a Tabour.*

*But stay! me thinks, one puls me by the sleeve,  
And tels me that I have my selfe forgot.  
Wherefore of doublings, here I take my leave:  
Intreating those that read, mistake me not.  
Let Muster-masters take their money, then;  
But let the Captains exercise their men.*

CHAP.

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## CHAP. XXXIX.

*Of Countermarches: Their Antiquity, and words of direction.*



He next branch of *Discipline* which offers it self to your perusal, are *Countermarches*: which are of three kinds. To wit, *Chorean*, *Lacedæmonian*, *Macedonian*: which is, Maintaining, Loosing, and Gaining. Each of them are to be performed two manner of waies. One by *File*: the other by *Rank*.

Diversities of opinions concerning loosing and gaining of ground. There are also *Counter-marches*, *Intire* and *Divisionall*. But divers men, are as divers in their opinions concerning the *Macedonian* and *Lacedæmonian* *Counter-marches*. Some will have the *Macedonian*, A *Counter-march* of gaining ground; because that it transfers the *Battalia*, into the ground before the *Front*. Others will have it, A *Counter-march* of losse; because (say they) the *Enemy* being in the *Reere*, it makes a semblance of flying. Some will have the *Lacedæmonian*, A *Counter-march* of gaining ground: because the *Enemy* appearing in the *Reer*, it makes a semblance of Charging or falling on. Others call it, A *Counter-march* to loose ground: because it looseth all that ground the *Battalia* stood upon; taking instead thereof, the ground behind the *Reere*. There are others of opinion, that there are *Countermarches* of losse and gain, in either of them. All these are furnished with *reasons*, to back their *opinions*. But



But if I should stand to shew their many and severall reasons, I might well be thought to be without reason my selfe. My opinion is; that taking the ground before the *Front*, is gaining ground: and that to leave the ground we stood on, to take the ground next behind the *Reere*, is losse of ground: And yet to take either, whereby there is advantage gotten, must needs be gaining. But where the matter it self is so indifferent, it were fondnesse to spend longer time about it. Wherefore note, that *Counter-marches* were of ancient use amongst the Greeks many hundred of yeeres since, and from them learned and practised, by many other *Nations*; and so still continued unto this day. But as the *Snow-ball* by much rowling, becomes the greater: So, in like manner these *Counter-marches* have received addition in all ages. So that the three originall ones are now become more then thirty accounting those *divisionall*. And yet are all of them fathered upon one or other, of the three kinds. Though some of them will scarcely be owned or acknowledged; as you shall perceive, when I come to shew them in their severall places. But amongst all the *Motions*, this might be the best spared: as being least *beneficiall*, to this our *moderne Discipline*. But because that knowledge is no burthen; and that at some times they may be usefull; therefore first take the words of command or direction, which are as followeth.

*Intire Counter-marches by File.*

Files { right } hand counter-march.  
to the { left }

Files

To go back unto the ground, we have formerly past, is losse of ground.

Counter-marches of great antiquitie,

Counter-marches least usefull of all other parts of the Art Military.

Lacedemon. Files  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  countermarch, every man turning to the  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  on the ground he stands.

Macedonian. File-leaders, face  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  the rest passe  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  about to the  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  through to the  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  and place your selves behind your Leaders.

Bastard Counter-march. File-leaders stand; the rest  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  placing your passe through to the  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  selves before your Leaders.

Bast. Count. Fileleaders stand, the rest  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  placing your passe through to the  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  selves before your Leaders; following your Bringers up.

Lacedemon. Bringers up, face  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  : the rest passe through about to the  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  : to the  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  and place your selves before your bringers up.

Lacedemon. Bringers up, stand : the rest of the Body passe through  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  placing your selves behind your to the  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  bringers up.

*Intire Countermarches by Ranks.*

Cretan or Corean. Ranks  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  Countermarch.  
Lacedemonian

Ranks  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  countermarch, every man turning to the  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  on the ground he stands.

This

This right hand file, face to the left : the rest passe through to the right : placing your selves behind your right hand men. Macedonian.

This left hand file may face to the right, and do as much.

This  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  hand file stand; the rest passe  $\left\{ \begin{array}{l} \text{right,} \\ \text{left,} \end{array} \right\}$  through to the placing your selves on  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  hand men. Balt. Counter-march.

This  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  hand file  $\left\{ \begin{array}{l} \text{right,} \\ \text{face to the left,} \end{array} \right\}$  the rest passe through to  $\left\{ \begin{array}{l} \text{right} \\ \text{left,} \end{array} \right\}$  placing your selves  $\left\{ \begin{array}{l} \text{right} \\ \text{left} \end{array} \right\}$  hand men. Lacedemonian.

*Divisionall Countermarches, by Files.*

Countermarch front and reere into the midst. Cretan or  
File-leaders, and half-file-leaders, stand; the rest Chorean.  
passe through to the right, and place your selves Balt. Counter-  
before your Leaders. march.

File-leaders, and Bringers up, stand; the rest passe Lacedemonian  
through to the right : and place your selves  
before your Leaders and Bringers up.

File-leaders, face about ; Bringers up, stand; the Macedonian.  
rest passe through to the Right, and place your  
selves behind your Leaders and Bringers up.

Front-half-files, interchange ground with the Balt. Count.  
Reere.

*Divisionall Countermarches by ranks.*

Countermarch your (wings) or Flanks into the Chorean or  
midst (or Center.) Cretan.

The



- Lacedemonian The outmost file of each Flank, face outward: the rest passe through to the right and left; placing your selves before your outside men.
- Macedonian. The outmost file of each Flank, face inward: the rest passe through to the right and left; placing your selves behind your outside men.
- Bas. Counter { The outmost file of each Flank stand: the rest passe through to the right and left, and place your selves on the outside of your outside men.
- Interchange your Flanks.

Note what is done by the *outmost files*, may be *reduced* by controverting the *command* to the *innermost files*; but must be done before they have *closed their divisions*, &c.

## CHAP. XL.

*Of the Chorean Countermarch: and the way to perform it.*

The distance for Counter-march is, sixe foot, or open order in ranke and file.



Could willingly have *prickt* a *Figure*, for each of these severall *countermarches*, but that they will take up too much room. And therefore I will onely *prick* some few of the hardest of them; and for the rest, I will endeavour by *words* to make them as *facile* as I may: that so they may be apprehended by the meanest capac-  
tic.

tie. And first I will begin with the (*Persian, Cretan,*  
or) *Chorean Countermarch*. The word of Command  
or Direction is,

*Files to the right hand, Countermarch.*

This *Chorean Countermarch* is by some called the *Moderne Countermarch*. I conceive their reason to be, because that it is more in use than any of the other: Or else, for antiquity, it might claime many ages. It is a *Countermarch maintaining ground*: for it worketh its effect on the same ground it stands; neither losing nor gaining. But it transfers the file leaders into the place of the bringers up: and the bringers up into the place of the file leaders: withall turning the aspect of the body, or battalia, to the Reere. The way to performe this motion, is as followeth. Assoone as the word of Command is given, if it be to the right, then all the file leaders step forwards with their right legs, and face about to the right; every file leader with his file following him, passing downe towards the Reere, through the intervall on his right hand, still observing to keepe even in rank with his right hand man. But by the way, note that no man must turne untill he come to the ground, where at first his file leader began the *Countermarch*. This motion is then performed, when the bringers up have attained unto the place where before their file leaders stood; being faced right after them, files to the left hand *Countermarch*.

Note, that when there is a Countermarch commanded without any other addition; then it is alwaies intended a *Chorean Countermarch*.

Observe the direction for the *Chorean Countermarch*

To counter-march to the left worketh the same  
I effect;

effect; and is done after the same manner; onely differing in the hand.

For *reducement*, if you *countermarch* to the right; doe as much to the left; and they will bee as they were. For any *intire Countermarch* of files will bee *reduced* (of what kind soever) by making another *intire countermarch*, to what hand soever.

## CHAP. XLI.

*Of Countermarching to lose ground.*

The Command is,

*Files to the right, Countermarch: every man turning after his Leader on the Ground hee stands.*

*Lacedemonian.*



His *Lacedemonian Counter-march*, is a *Counter-march* of losse of ground; for that it leaves all the ground the *Battalia* formerly did containe, and in lieu or place thereof taketh the ground behinde the *Reere*. This *countermarch* is to bee performed, when the *body* is upon a *stand*. And as the *Chorean* turnes the *Aspect* towards the *reere*; the *Greeks* were wont with this *Countermarch* to bring their *file leaders* to oppose any enemy appearing in the *Reere*; thereby gallantly bearding their enemies in



in the teeth : neither politickly making shew of flight, whereby to bring the enemy into *disarray*; nor over providently carefull of the *advantage* of ground. The *motion* of this *Countermarch* is to be performed as followeth. The *file leaders* of each *file* are to step side-waies to the *right*, and therewithall to *face about* to the *reere*; and so *march* even in *rank* together downe betweene the \* *Intervals*; \* An Intervall is the space of ground between file and rank; but in this place is intended the space of ground between the files no man advancing a *foot* forwards, but turning in like manner after their *leaders*, when they are past by them; still observing to keep their due *distance*. And so a whole *ranke* together, still turning off to the *right*, each *ranke* successively doing the like, untill the *countermarch* be fully performed. Any *intire countermarch* of *files* will reduce this. But for order sake, take one of the same sort to the contrary *hand*, which is,

*Files to the left, Countermarch : every man turning after his Leader, on the ground he stands.*

I shall not need to speake further concerning this *Counter-march* of losse of ground to the *left* : seeing that it differs from the other only in the alteration of the *hand*. The substance and effect of both being one and the same : onely I will now speake of a *second* sort of *countermarch*, which is of the same kind. The *command* is;

*Bringers up* face about to the *Right*; the rest passe through to the *Reere*, and place your selves before your *bringers up*.

Lacedemonia.

This *Lacedemonian countermarch* doth also lose the ground whereon it formerly stood, and takes the ground behind the *Reere*: the manner of the motion is as followeth: The last *ranke* or *bringers up* face to the *Reere*, and stand: the rest of the *body* facing about in like manner, and passing through or betweene their *bringers up*, and placing themselves even in *rank* before them. The motion is begun by the *rank* next the *bringers up*, and so continued successively by the rest, untill the *countermarch* be ended. It may be reduced by doing the same to the *contrary hand*. Neverthelesse, for brevity sake, I will make use of a sprig from the same bough, and reduce this *Lacedemon countermarch* by another of the same kind. The *Command* is,

*Bringers up*, stand, the rest passe through to the *Right*, and place your selves behind your *Bringers up*.

Lacedemonian

This *Lacedemonian Countermarch* is thus to be performed; the last *ranke* (or *bringers up*) are to stand, and the rest of the *body* to face to the *reere*, and passe through to the *Right*, and place themselves behind their *bringers up*, contrary to the *countermarch* last shown, where they placed themselves before. The motion is also begun by the second *rank* from the *reere*, the rest following successively, untill the *file leaders* are become the *bringers up*: Then face them about after their proper *file-leaders*, and they are reduced.

CHAP.

CHAP. XLII.

Of Countermarches to gain ground, or the  
Macedonian Counter-march.

The Command is,

*File leaders: face about to the right, the rest passe through  
to the right, and place your selves behind  
your Leaders.*



His Macedonian Countermarch, is for Macedonians, gaining ground, for that it leaves the ground, the Battalia formerly stood upon, taking in lieu thereof, the ground next before the front. It also turnes the aspect towards the reere. The motion of this Counter-march is from the reere to the front contrary to the Lacedemon, whose motion is from the front to the reere: This Macedonian counter-march makes semblance in the reere of flight, but presently produceth an orderly seiled front, when perhaps the enemy, with a too early pursuit, hath broken the order of their array.

Macedon  
Counter-  
March makes  
semblance of  
flight.

The way to perform this Countermarch, according to the directions formerly given, is as followeth: The file leaders or first rank, face about to the right: the rest of the body passe through, between the Intervalles, (or distance of files) to the Right and place themselves behind their leaders; every rank (beginning with that next the file leaders) passing through successively, and taking their places,



places, untill the *Countermarch* be fully executed. It may be reduced as the rest, by doing the same to the *contrary hand*; or as I have formerly said, by any intire *countermarch* of file; and therefore I will reduce it by another *Macedonian countermarch*. The *command* is, as followeth.

*File leaders face to the Reere, the rest of the body passe through to the left, following your bringers up, placing your selves behind your leaders.*

Macedonian.

This *Macedonian countermarch* is rather remembered for its antiquity, then excellencie, (as some more of them be) neverthelesse if any will be curious to observe the *motion*, it may be performed as followeth: The *first ranke* (or *file leaders*) face to the *reere*, then the *last rank* begin the *countermarch*, passing forward betweene the *Intervalls*, the *seventh rank* following the *eighth*, the *sixt* following the *seventh*, and so likewise the rest, untill the whole *body* be transferred into the ground before the *front*, and then joyntly together, facing to the *right* about, after their *leaders*, the *countermarch* is ended. For *reducement*, observe this for all; that any intire *countermarch* of file, may be reduced by another intire *countermarch* by file, of what kind, or to what *hand* soever.

Thesethree last Chapters of *countermarches*, are the originall grounds of all the rest, yet I shall shew one in the insuing Chapter, which time hath begotten out of the latter *two*, which takes part with *either*, being absolute in *neither*.

CHAP.

CHAP. XLIII.

Of the Bastard Counter-march.

The Command is,

*File-leaders stand, the rest passe through to the right  
and place your selves before your Leaders.*



His passing through (or *bastard counter-march*) is partly *Macedonian*, and partly *Lacedemonian*; for first with the *Macedon*, it takes the ground before the front, the Motion being from the Reere forward: it is partly *Lacedemonian*, for that they passe through, and place themselves before their *Leaders*, and for that it makes semblance of *falling on*, or *charging* the enemy: neverthelesse the *Macedonian* disclaims it, for that it alters not his aspect: The *Lacedemonian* refuseth it, for that it takes the ground before the front, and not that behind the reere: and with the *Chorean*, it holds no affinity. And indeed many there be that will not allow it for a *countermarch*, for certain the word it self will not beare it; notwithstanding seeing that it hath been long ranged amongst them, I will not be he that shall displace it, but will passe forwards, to shew the manner of the motion, which is to be performed as followeth. The *file-leaders* stand, according to the former direction, the rest of the *body*, advance their armes;

Bastard  
Counter-  
march.

This Bastard  
Counter-  
march is in-  
troduction.

the *second rank* first passing through to the *right*, and placing themselves before the *first rank*, the *third rank* before the *second*; the *fourth* before the *third*, and so forwards for the rest, untill the last *rank* (or *bringers up*) are become the *foremost*, which perfects the *motion*. It may be severally usefull, as to *skirmish* against an enemy, advancing by way of *introduction*, or upon occasion, to bring the *reere men* to *march in front*, and such like. For the *reducement*, you may do, as much to the *contrary hand*, onely for order sake, I will *reduce* it, by another like it selfe. The Command is,

*File-leaders! stand, the rest passe through to the right, placing your selves before your Leaders, following your bringers up.*

Bast. Counter-  
march.

This *motion* may be done either to the *right* or *left*, and is nothing differing from that *last shewn*; but that, whereas the *other* began with the *second rank*, this contrariwise begins with the *last rank*, (or *bringers up*) every *rank* successively following the *rank* which came from *behind* them, untill they which were the *leaders*, are become the *last* in the *reere*. If this *countermarch* be first done, it may be reduced by any of those formerly shewn, &c.

CHAP.



CHAP. XLIV.

*Of Countermarching ranks, to maintain ground.*

The Command is,

*Ranks to the right hand countermarch.*



His *Chorean* countermarch of ranks, is an *Chorean* altering or changing of one flank for the other, the Battalia still keeping the same ground, onely the right flank becomes the left, and the left becomes the right. The way to perform this motion, is as followeth: the command being given, then the whole body faceth to the hand named, and every man in the outmost file, to the right: (files by this facing, being become ranks) turns down through the *Intervalle*, or (distance between rank and rank) marching forth right unto the part, which was the left flank, with their ranks, file-wise following them, being come unto their ground, they face as before, and the countermarch is performed: for the *reducement*, let ranks countermarch to the left, after the same manner, differing onely in the hand, and they are as at first.

CHAP.

## CHAP. XLV.

*Of Countermarching Ranks to lose Ground.*

The Command is,

*Ranks to the right-hand Countermarch, every man turning after his right-hand-man, on the ground he stands.*

*Lacedemonian.*



Ranks by this facing become files, & files to the Contrary become ranks.

**H**IS *Lacedemonian - Countermarch of Ranks*, is a falling on upon the left Flank: the Motion being begun by the right; It leaves all the ground, the Battalia stood on, and takes in place thereof the ground beside the left Flank, turning the Aspect to the left: The manner or way to perform this Motion, is as followeth: The whole Body faceth to the right; and then the right-hand-file being faced, (becomes a Rank) begins the Countermarch, turning down the Intervals of the Ranks, (which by this facing, is made the distance between the Files) and so marcheth forth-right, beyond the left Flank, every man following him that was his right-hand-man (but not stepping forwards one foot of ground) untill the Countermarch be performed. For the reduction of this Countermarch, do as much to the left, and they will be as at first: Or (if you please) take another of the same kind; the word of Command, or direction is.

*Right*

*Right-hand-file, face to the right, the rest passe through to the right, and place your selves before your right-hand-men.*

**T**His *Lacedemonian Countermarch of ranks*, makes *Lacedemonian*, a falling on upon the right Flank, the Motion being from the left Flank, to the right, leaving all the ground whereon the Battalia stood, and taking in lieu thereof the ground beside the right Flank. In those dayes, when Countermarches were more usefull for their Discipline, then now they are for ours; the *Lacedemonian Countermarches* were of chief repute, aswell amongst the *Macedonians*, as the *Spartans* and others: the way to perform this Motion is as followeth. The *right-hand-file* fa-  
ceth to the right, and passeth through the *Intervals* or spaces, to the right: placing themselves, before their *right hand-men*, untill the *left-hand-file*, become the *foremost rank*; If you do this *Countermarch* by it selfe, then for *reducement*, first face them to their *Front proper*, then let the *left-hand-files* face to the left, and do as much to the left; and then they will be as at first.



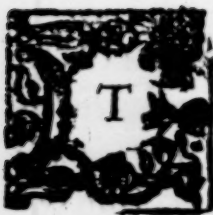
## CHAP. XLVI.

*Of the Macedonian Countermarch  
by Ranke.*

The Command is,

*Right-hand-file face to the left, the rest passe through  
to the right, placing your selves behind  
your right-hand-men.*

Macedon.



*His Macedonian Countermarch of ranks,  
contrary to the Spartan, dismarcheth  
from the enemy upon that Flank where he  
appeares, and presents the contrary Flank,  
to receive the Charge. It is performed after this  
manner. The out-most-file to the right, faceith to  
the left. The rest of the body, or Battalia, faceith to  
the right; every man passing thorough to the right,  
and placing themselves behind their right-hand-  
men: For the reducement of this Countermarch,  
as all the rest, there are divers, and severall wayes;  
but perform as much to the left, as you have done  
to the right, and they will be as at first: Or if you  
please, this following Bastard Countermarch will  
do the same.*

The

The word of Command or Direction is,  
*Right-hand-file stand, the rest passe through to the  
 right, placing your selves, on the outside  
 of your right-hand men.*

**T**His passing through, or *Bastard Countermarch* Bast. Count.  
 of *Ranks*, doth alter both *ground* and *flank*;  
 (still reserving the *Aspect*, without *alteration*.) It  
 is to be performed as followeth. The outmoſt  
 or *right-hand file* stands; the rest of the *body*,  
 facing to the *right*, passe thorough to the *right*,  
 every man placing himself on the *right* side of his  
*right-hand man*, and so standing even in *Rank*, the  
*Motion* still continuing, untill the *left-hand file*, is  
 become the *right*; the *right*, the *contrary*. If this  
*Countermarch* be done alone, for the *reducement*; let  
 the *left-hand file* stand, and do as much to the *left*,  
 as before to the *right*, and they will be as at first.

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CHAP. XLVII.

*Of Countermarching Front and Reere  
 into the midst.*



Or the *Intire Countermarches*, I have Of divisionall  
 Counter-  
 indeavoured to expresse them, as well marches.  
 as I could in words, but for the *divi-*  
*sionall Countermarches*, I intend to  
 demonstrate, both in *word* and *figure*,  
 wherby they may be the more easily apprehen-  
 ded

Middest and  
Center.

The midst is  
to be under-  
stood in a two  
fold sense, ei-  
ther between  
the Files, or  
between the  
Ranks.

ded by such as shall be desirous to know them: notwithstanding before I enter upon the *divisionall Countermarches*, I would willingly cleere one thing which by some will be carped at; which is, the using of the word *Middest*, instead of the word *Center*: The word *Center* (I confesse) hath been the more usuall word amongst us: and yet it is not altogether so proper to our use as the other; wherefore give me leave, without offence, to use those words, which are not onely more proper, but more significant. The *Midst* of the *Battaile*, is to be understood, either from the *Front* and *Reere*; or from *both Flanks* (or *wings*;) If between *Front* and *Reere*, the *Midst* must be between the *half-file-leaders*, and the *Reere rank* of the *Front half-files*, extending it self from *Flank* to *Flank*: The *Midst* between the *Flanks*, is between the two *innermost files*; continuing the whole *depth*: from *Front* to *Reere*. The *Center* is truly the extremest part tittle or point in the *midst* of a *circumference*, and therefore not so pertinent to expresse the intention and true understanding of the *Motion* as the word *Middest*. Wherefore not to trifle time in matters so apparent, we will proceed to our first *divisionall Countermarch*, which shall be *Chorean*.

The



The Command is,

*Countermarch Front and Reere into the midst.*

*Chorean.*

The Direction is,

*Half-files face to the Reere; Front half-files turn off to the right; Reere half-files to the left.*

Front.

m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m	2
w	w	w	w	d	d	d	d	d	d	d	d	w	w	w	w	1
m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m	3
m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m	4
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
w	w	w	w	d	d	d	d	d	d	d	d	w	w	w	w	5
w	w	w	w	d	d	d	d	d	d	d	d	w	w	w	w	6
m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m	8
w	w	w	w	d	d	d	d	d	d	d	d	w	w	w	w	7

Reere.

This *divisionall Chorean countermarch*, brings our *File-leaders*, and *bringers up* together in the *midst*, and the *ranks* that were in the *midst* in the *Front* and *Reere*. It is a *countermarch* mayntayning ground; for every man *marcheth up* into his *leaders* ground; before he *faceth about* to *countermarch*: The way to perform the *Motion*, is as followeth. The *command* being given to *countermarch*, either let the *commander*, or some other of the *Officers*, command the *halfe files*, to *face about*: then the *file-leaders* stepping forwards, with the right legge,

Front half-files ever turn off to the Right, the half-files to the Left, which being truly observed, they will *alwayes* meet even in the middle of the *Battaile*, where to the contrary, if they turn both off to the Right, they can never do the *Countermarch* but wrong,

and

Note, that for  
Counter-  
marching  
Front and  
Reere into the  
midst, the

and face about to the right, passing down the *Intervals* on the right hand, the rest of the *Front half-files*, following their *Leaders*, and not turning, untill they come to the ground, where their *Leaders* turned down before them : The *bringers up* with the *Reere half-files*, at the same instant turning down their *Intervales*, on the left hand, the rest of their *division* following them, untill the *file leaders* and *bringers up*, meet together in the *midst* of the *Battaile*, and then having faced all to their *Leader*, the *Motion* is performed. For the *reducement* of this figure, doing the same thing over againe, will reduce it. Or any other *divisionall countermarch* of *File*.

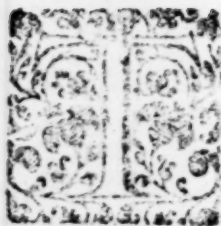
### CHAP. XLVIII.

*Of bringing Front and Reere together, into the midst, by the Bastard Countermarch.*

The Command is,

*File-leaders, and half-file leaders stand, the rest passe through to the right, and place your selves before your leaders.*

Bast. Counter.



*His Bastard Countermarch, doth bring the Leaders, and bringers up, together, into the midst, and saves two facings, and is quicklier performed, then the other last done : or any other in the precedent*

*cedent Chapters*: The way to performe the *motion*, is as followeth: The *first ranke* stands: and the *halfe file leaders* stand, then those of the *Front halfe files* passe thorough their *Intervalls* to the *right*, placing themselves before their *file leaders*: The *second rank* before the *first*, the *third* before the *second*, the *fourth* before the *third*; the *Reere halfe files* at the same instant doing the like and placing themselves before their *halfe file leaders*, as the other did, before their *file leaders*: This *Motion* may bee either reduced by doing the same over againe to the *contrary hand*, or else by *Counter-marching front* and *reere* into the *midst*, or by any other of the *divisionall countermarches* of *files*.

Note that as the front half files empty the space of ground between the leaders and half-file leaders placing themselves in the ground before the front, so in the mean time their places are replenished by the souldiers of the Reere half-files which march up and supply their roomes.

*Another way of bringing the front and reere into the midst by the Chorean countermarch.*

The Command is,

*Front and reere halfe files, Countermarch to the right.*

**T**His *Chorean countermarch* doth also bring the *file leaders* and *bringers up* together into the *midst* and turnes the *aspect* towards the *Reere*, making the *halfe file leaders*, the *file leaders* accidental. The *countermarch* is easie and quickly performed; the manner is as followeth; (The *command* being given as aforesaid) the *front halfe files* *countermarch* to the *right*, following their *file leaders*. The *reere halfe files* in like manner, and at the same time *countermarch* to the *right*, following the *half file leaders*, every *file leader* falling directly after his *bringer up*.

Chorean.

K

For



Reducement.

For *Reducement*, counter-march front and reere into the midst; then face to the first front, and they are as at first.

Part counter-marches.

Sometimes occasion may require a *part counter-march*, as when the front halfe files, Reere halfe files, halfe ranks of the right, halfe ranks of the left, or any other part of the body (more or lesse) doth counter-march to either hand, not intermixing with the standing part of the body: and these *part counter-marches* may be performed either after the *Chorean*, *Lacedemonian*, or *Macedonian* way: nevertheless, I willingly forbear to enlarge my selfe; rather with the dogs of Nile run and lap, giving onely a touch of these things and away; leaving others more amply to proceede that shall affect more curiosity; whilst I proceede to the next Chapter and *Counter-march*.

## CHAP. XLIX.

*A Divisionall Counter-march to make a large Interval betweene the first and last ranks.*



His *Divisionall Lacedemonian Counter-march* makes semblance of charging or falling on to the front & reere; leaving all the ground which was occupied by the Souldiers betweene front and reere; transferring them into the ground before the front, and behind the reere. The ground (or place) of the former standing, by this *Motion* becomming vacant; which I have demonstrated in

in the Figure by the *pricks*. This *Countermarch* notwithstanding that it beare the name of the *Lacedemon*, yet the *motion* of the *front halfe files* is after the manner of the *Bastard countermarch*; that of the *reer halfe files* only being after the *Spartan guise*. The *command, direction, & figure* are as followeth.

The Command is, *File leaders and bringers up stand, the rest passe thorough to the right, and place your selves before your leaders, and bringers up.*

The Direction is, *Halfe files face to the reere.* Lacedemonia  
Front.

	4	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m	4	
	3	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m	3	
	2	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m	2	
	1	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m	1	
Left Flanke.	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	Right Flanke.
	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3	
	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	
	5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	5	
	6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	6	
	7	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	7	
	8	w	w	w	w	d	d	d	d	d	d	d	d	w	w	w	w	8	
	7	w	w	w	w	d	d	d	d	d	d	d	d	w	w	w	w	7	
	6	w	w	w	w	d	d	d	d	d	d	d	d	w	w	w	w	6	
	5	w	w	w	w	d	d	d	d	d	d	d	d	w	w	w	w	5	

Reere.

The way to performe this *Motion* is as followeth. The *halfe files* are commanded to *face* to the  
K 2 reere;

If you reduce them by another Countermarch, first close their divisions.

reere; and then the *front half files* passe through to the *right*; placing themselves before their *leaders*; the *second ranke* before the *first*, the *third* before the *second*, the *fourth* before the *third*; the *reere half files* at the same instant passing through to the *Reere* after the same manner, and placing themselves before their *bringers up*. You may perceive by the *Figures of Number*, placed on the *Flankes* of the *Figure of Battell*, both how the men stood before the *Motion* beganne, as also how and in what place they stand, the *Motion being ended*. For the *reducement*, if you have not closed their *distance*, you may *face* them *about*, and so let them passe againe into their places: Or else, by doing the same *countermarch* ouer againe, or to the *contrary hand*, or any such like way, will *reduce* them. This next following *Countermarch* will also *reduce* them, or this will *reduce* that. The *command* and *direction* is, as you shall find it placed over the *front* of the *figure*.

#### CHAP. L.

*Of making a large intervall betweene the first and last ranks, by the Macedonian Countermarch.*

Macedonian.



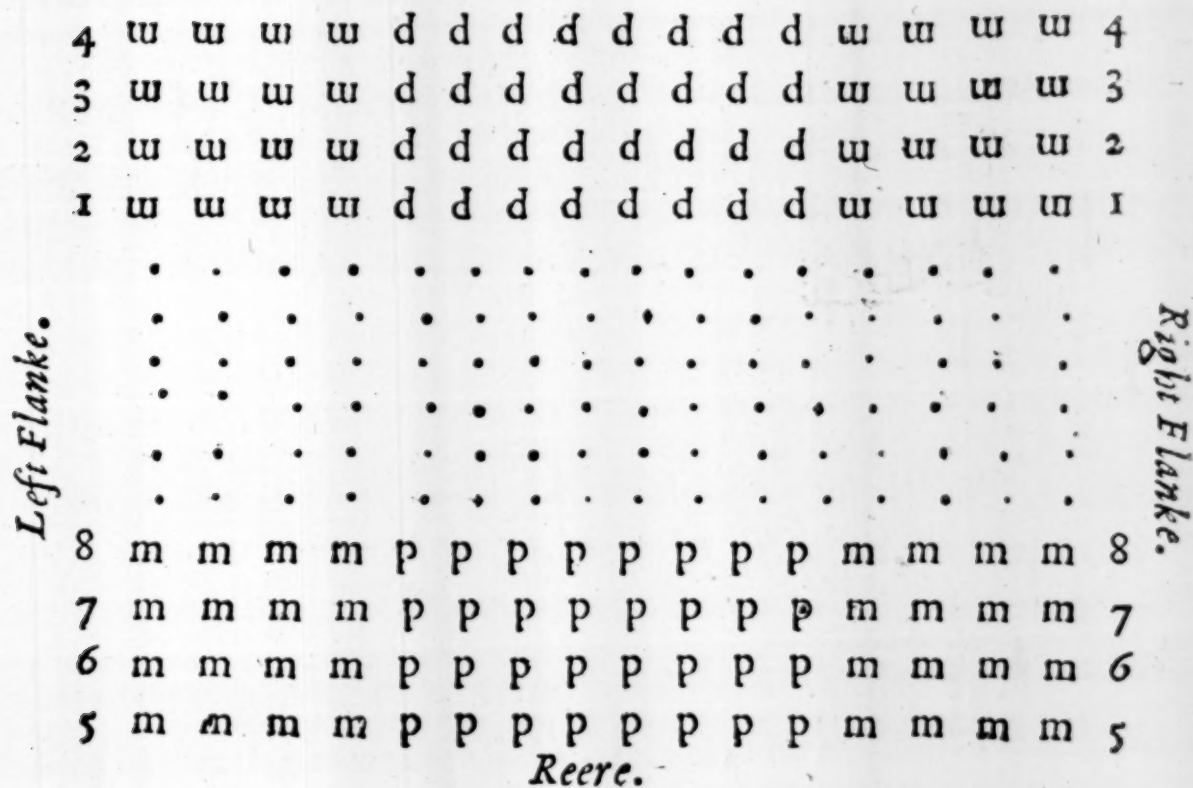
His *divisional Macedonian Countermarch* is little different from that next before it, only the other, turned the *Aspect* outward, to the *front* and *reere*; this *Countermarch* turnes the *Aspect* inwards, towards the *midst*. It may be usefull, if the *Commander* would shew or publish ought, before his best Souldiers,



Souldiers, for that it not onely leaves a large distance, but that it brings the best Souldiers into the midst, with their Aspects directed inwards : It may also serve to conduct any great Personage crosse the length of your battell, whereby to shew them the bravery of your Souldiers, &c. The figure followeth.

The Command is, *File-leaders face about, Bringers up stand, the rest passe through to the right, and place your selves behind your file-leaders and Bringers up.*  
The Direction is, *Half files face to the reere.*

Front.



Reere.

The Motion of this Countermarch may bee thus performed: The first ranke (or file-leaders) face about, the last ranke stands, the Reere halfe files face about,

Note that when the reere halfe files face about, the last ranke, which are the bringers up, are still to keep their standing.

about, and so the *front division* passe forwards, and place themselves behind the *file leaders*, the *reere halfe files* behind their *bringers up*. The manner you may perceive the plainer, if you note the *Figures of number*, which are placed on the *flanks* of the *figure*, their *number* shewing the *places* they had from the *front* before the *motion* began. This *figure* may be reduced, either by the same *word* of *Command* which produced it, or else by any of the foregoing *divisionall Countermarches*. Our next shall be a *Countermarch of exchange of ground*. The *words* for *command*, or *direction*, are as followeth.

## CHAP. LI.

### Of interchanging Ground.



His *interchanging of Ground*, or *bastard Countermarch*, may not rightly be said to bee derived from any one of the particular *Grounds of Countermarch*; but rather participating of them all; And yet considering it actually performed, it is different from them all: for whereas the other *countermarches* of *files in division*, although they bring the *front* and *reere* into the *middest*, yet the *front halfe files* continue still on the same part, and the *Reere halfe files* doe not alter into the places of the other. But this, contrary to any other of the *divisionall countermarches*, *transferres* the *front halfe files* into the *ground* or *place* of the *reere halfe files*; and them into the *contrary part*, bringing the *file leaders* and *bringers up* together into the *midst*. The following *figure* demonstrates the *body in motion*.

The

The Command is,  
*Front and reere halfe files interchange  
 ground.*

The Direction is,  
*Front halffiles, face to the reere.*

Bast. Countermarch  
 in Motion.

*Front.*

. . . . .  
 . . . . .  
 m m m m p p p p p p p m m m m 5  
 m m m m p p p p p p p p m m m m 6  
 1 u u u u d d d d d d d d u u u u  
 m m m m p p p p p p p p m m m m 7  
 2 u u u u d d d d d d d d u u u u  
 m m m m p p p p p p p p m m m m 8  
 3 u u u u d d d d d d d d u u u u  
 4 u u u u d d d d d d d d u u u u

*Reere.*

The way to performe this *motion* is as follow-  
 eth. The *front halffiles* face about, passing forward  
 to the *right* (being led by the *bringers up* of the *front  
 halffiles*) between the *Intervalls* toward the *reere*;  
 The *reere halffiles* at the same instant in like man-  
 ner *marching* forwards, between the *Intervalls*, on  
 their right hands into the *front*, untill the *front-di-  
 vision* have attained the places of the *reere*, and  
 K 4 they



Reducement. they contrariwise, the places of the front. For the *reducement* of this *countermarch*, do as much backe again; Or if you would *reduce* it some other way, you may first make an *intire countermarch* of files, and then *countermarch front & reere*, into the *midst*; for under two *countermarches*, it will not be *reduced*. Now I will passe to shew *divisionall countermarches* of ranks, or flanks; The first shall be *Chorean*; as in the Chapter following.

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## CHAP. LII.

*Of Counter-marching the flanks (or wings) into the midst of the Battell.*



His *Chorean counter-march* of the *wings* (or *flanks*) into the *midst* is ordinarily used when the *Commander* would bring the light armed into the *midst* of the *battell*, to secure them from the incursions of the *Horse*. It is a *Motion* too dangerous to meddle withall in the eye of the *Enemie*, although the *Souldiers* be expert; but by no meanes to be thought upon in the field, amongst the untrained and unskilfull. This *countermarch* performes the *Motion* on the same ground. The figure followeth.

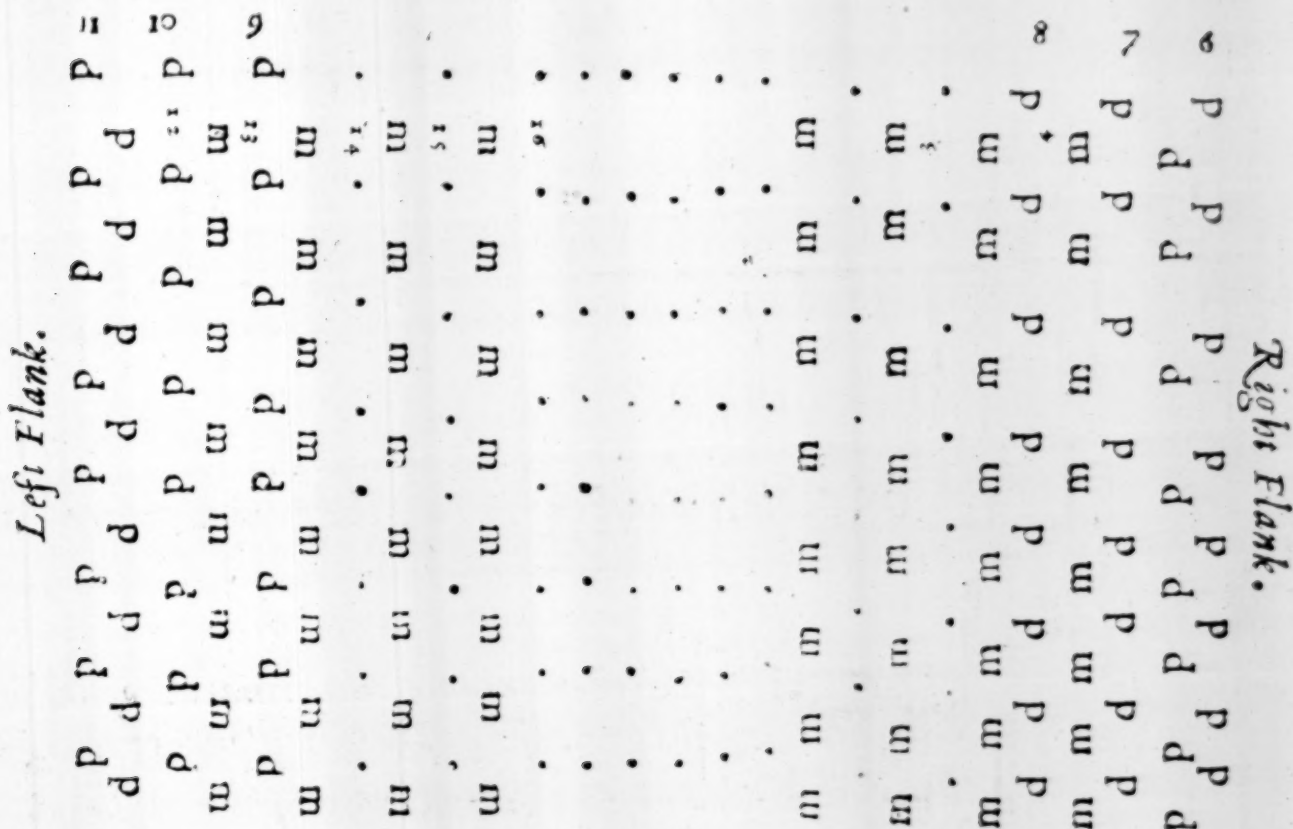
The

The Command is,  
*Countermarch your flanks into the midst.*

The Direction is, *Face to the Right and Left.*

Chorean.

Front.



Reere.

The command being given, the whole body faces to the right and left by division; the outermost files by this facing, becoming ranks, every man in the right hand file, being a leader to his half rank file-wise, and so likewise in the left hand file the same, then they countermarch the right flank to the right, the left flank to the left, which you must alwayes observe to do, and your flankers will meet just in the midst of your Battalia. Lastly, having faced them to their first front, the countermarch is ended.

Note that upon the Countermarching of flanks into the midst, the right flank must alwayes observe to turn to the right, the left flank to the left: for if they should both turn off to the right, they wil never meet right if they turn off both to the left, it will be as bad.

To

To reduce them, they may either use the same Countermarch againe, or any of these following *divisionall countermarches of flanks*, (unlesse it be that of *interchanging of ground*.) The next shall be *Lacedemonian*, the Command and words of Direction, are, as in the Chapter following.

---

CHAP. LIII.

*Of Countermarching to take the ground before the flanks.*



His *Lacedemonian Countermarch of halfe ranks or flanks*, makes semblance of charging on, and issuing forth upon both flanks, but leaves a large wast distance of ground, unoccupied between the two outmost files, or midst of the battell. The Command and Figure followeth.

The

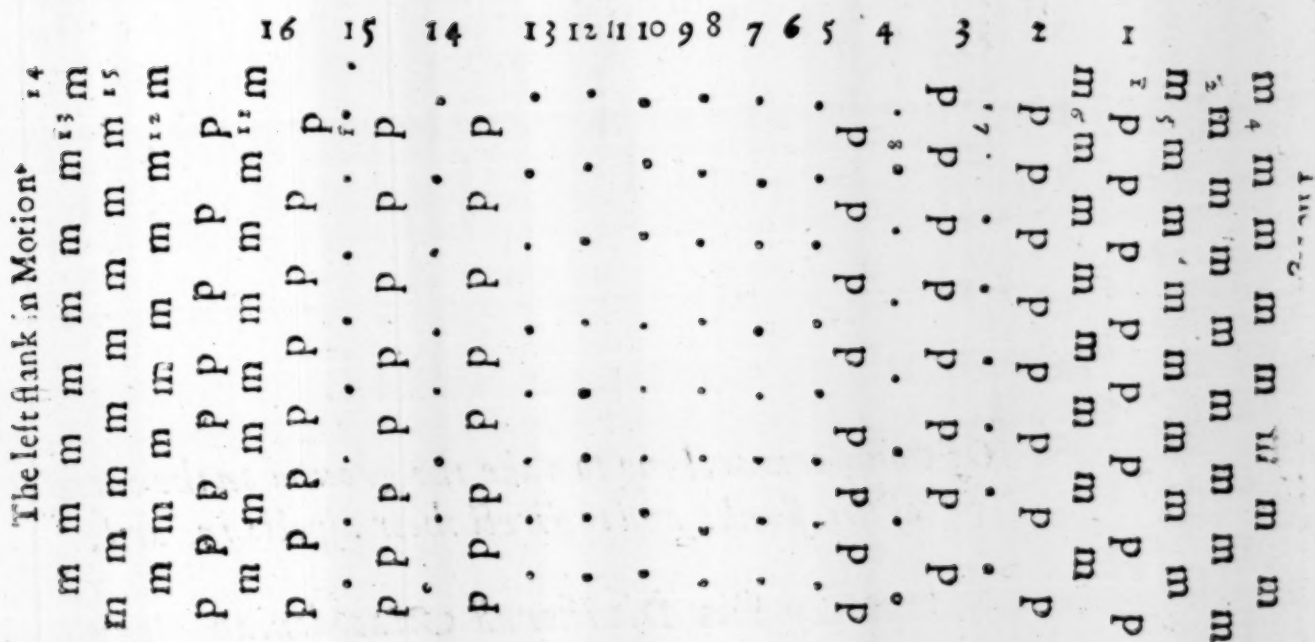


The Command is,  
The outermost file of each flank, face outward, the rest  
passe through to the right and left, placing your  
selves before your out-side men.

The Direction is,  
Face to the right and left.

Lacedemonian.

Front.



Reere.

The way to perform this *Motion* is as follow-  
eth. The *right-hand-file* faceth to the *right*, the  
*left-hand-file* to the *left*; the rest of the *body* faceth  
to the *right* and *left*, the *right-flank* passing through  
to the *right*, and placing themselves, before their  
*right-hand-men*. The *second file* from the *right*,  
begins the *Motion* on the *right-flank*; the *left flank*  
in

in like manner, passing through to the *left*, and placing themselves before their *left-hand-men*; the *second file* accounting, from the *left*, begins the *Motion* on the *left-flank*: But you must note, that the *files* become *ranks* with the *facing*.

For the *reducement* of this *figure*, it you will first *face* them to their *proper front*, you may then command the *two inmost files* stand, the *rest* *pass* through to the *right and left inward*, and take their places: Or if you please, make use, either of a *Chorean*, or a *Macedonian Countermarch* of *Ranks* by *division*, and with a *facing*, and *closing* their *divisions*, they will be perfectly reduced.

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#### CHAP. LIIII.

*Of Countermarching to take the ground on the outside of the flanks, and to direct their aspects inward.*



His *Divisionall Macedonian Countermarch*, differeth little from the *Countermarch* of the last Chapter; except it be in the alteration of the aspect: for whereas the last *Countermarch* turned the fronts of each flank outward; this contrariwise directeth them inwards, causing each flank to confront the other in opposition. The Command and Figure are as followeth.

The





Reducement.

the courteous, not much forcing my selfe to give satisfaction to the curious. For the *reducement* of this *Countermarch*, having faced them to their first front, you may if you please, command the two innermost files to face outward, the rest passe through to the right and left inward: placing themselves behind their right, and left-hand men; which being done, the whole body will stand faced to the right and left outward; Then being faced to their Leader, they are reduced. If you would reduce it by some other way, you may make use, either of the *Countermarch*, which is next before, or of that, which next followeth: Or of any other *divisionall Countermarch* of Ranks; (which doth not interchange ground.) Our next two which follow, will be *Bastard Countermarches*, with the which we will conclude this our fourth branch of Discipline.

## CHAP. LV.

Of taking the ground on the outside of the flank,  
not altering the Aspects.



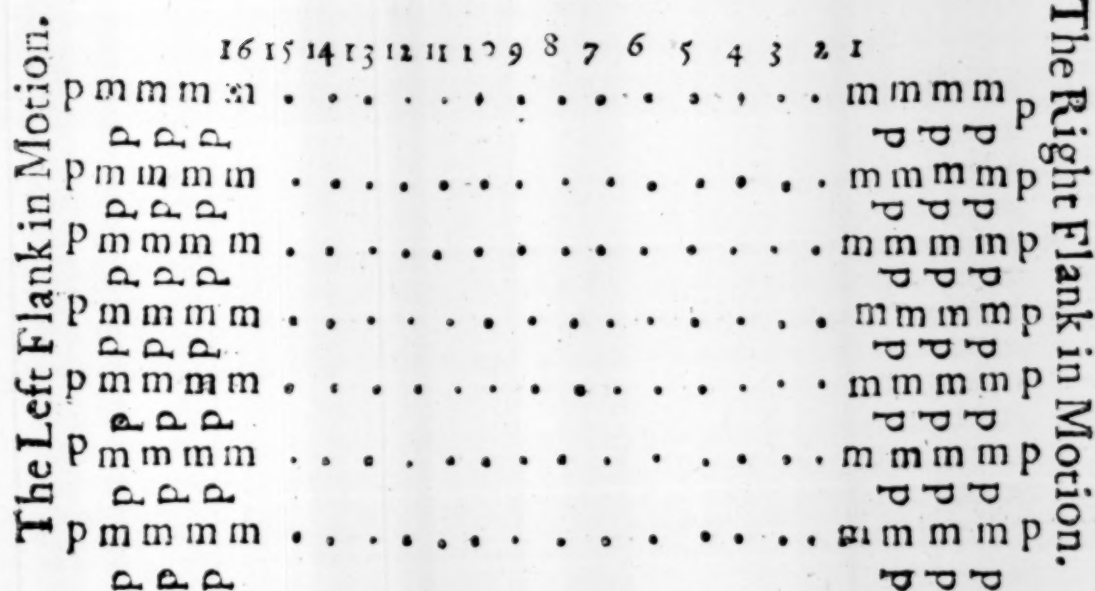
His *Divisionall Bastard Countermarch*, producelth the same effect with the other two next before it wrought; onely differing in the Aspect: for the Lacedemonian turned the Aspect outward; the Macedonian turned the Aspect inward: and this keeps the Aspect still directed the same way. He that knowes

knowes every way, may when time serves, make use of those wayes which are most necessary and futable to his present occasion: and the proverb saith, *Knowledge is no burthen*. The Command and Figure are as followeth.

The Command is, *The outmost file of each Flank stand, the rest passe through to the right and left, and place your selves on the outside of your right and left-hand men.*

The Direction is, *Face to the right and left.*

Front.



Reere.

The way to perform this Countermarch is as followeth (according to the Command) the *outmost file* of each flank stands; the rest of the *Body* faceth to the *right* and *left outward*, the *right flank* passing through to the *right*, the *left flank* to the *left*; those of the *right flank*, placing themselves on the *outside*

The Reduce-  
ment,

*side of the right-hand men : in like manner, those on the left flank, placing themselves on the outside of their left-hand men.*

It may be reduced, either by any of the foregoing *divisionall Countermarches of Ranks*, or else being faced, to any of the flanks, then the ranks become files. And by *divisionall countermarches of files*, you may reduce *divisionall Countermarches of Ranks*, or by *ranks, files*; onely you must observe some facings: Yet for this Figure, if you please, Command the two innermost files stand; the rest, face to the right and left inward, and so march into their places. The next shall be a *Countermarch of interchanging of flanks*.

## CHAP. LVI.

*Of Interchanging ground by the Flanks, and bringing the innermost files of Pikes, to become the outmost Ranks.*



His Exchanging of flanks, is a *bastard Countermarch*, but differing from all the other *divisionall Countermarches of Ranks*; for this transfers the *right flank* into the place of the *left*, and the *left* into the place of the *right*. It is very apt to receive a sudden charge from the horse; for as soon as they shall be commanded to *Interchange* their flanks; they face to the *right and left inward*, and then the *innermost files of Pikes* begins the *Motion*, the rest of

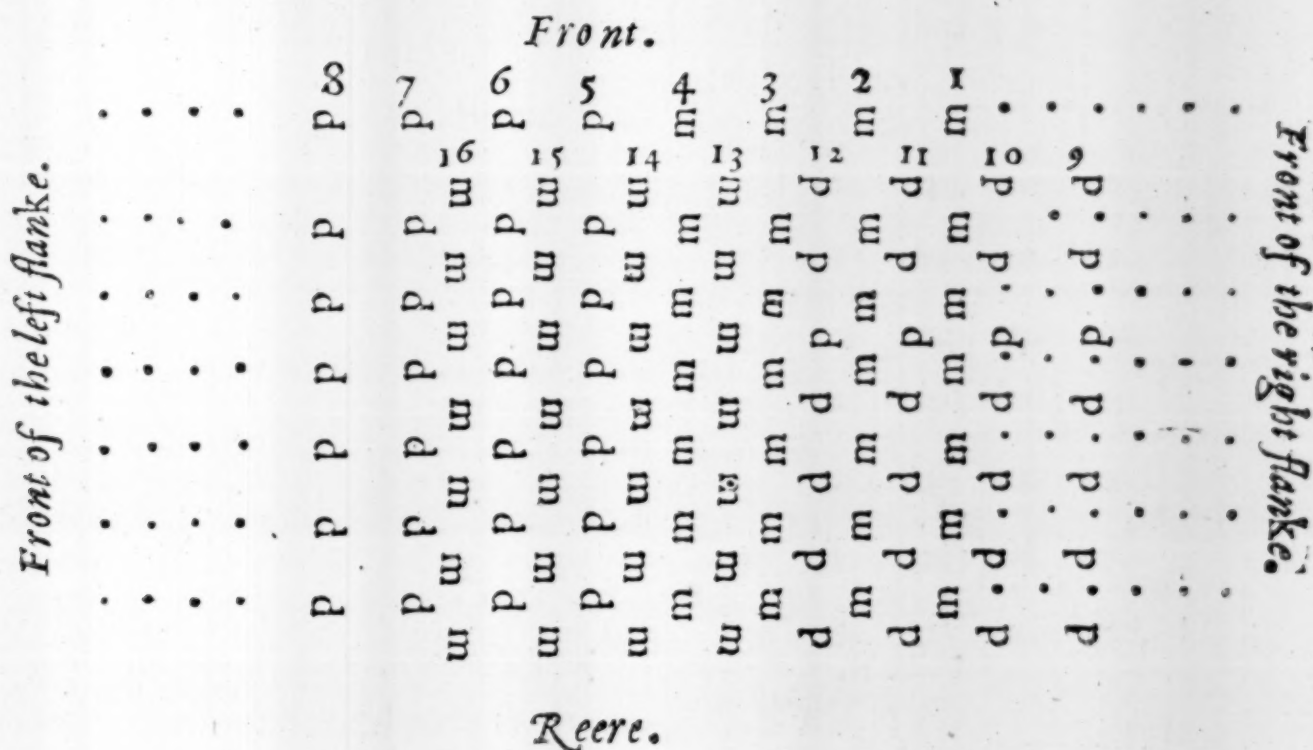


of each *flanke*, following orderly *filewise*, the *Pikes* *porting*, so soone as they begin to *move*, and *charge* as they see occasion, If need bee, the *Pikes* may *charge* at the *foot*, and the *Muskettiers* give fire over them: If any object that the *Pikes* will have too large a distance, they may *close* at their owne pleasures, so soon as they have past thorough. The Command and Figure are as followeth.

Note that if you please, you may passe the *Pikes* alone through, and let the muskettiers, stand. But then there will be a large distance betweene the Muskettiers in the midst,

The Command is,  
*Interchange Flanks.*

The Direction is,  
*Face to the right and left inward, and march.*



L

For

For the *reducement*, you may, if you please, *interchange ground* again : neverthelesse, if you would reduce it, by some other way, *Countermarch* your *flankes* into the *middest*, and then an *intire countermarch*, either of *ranke* or *file*, will reduce them.

Countermar-  
ches left useful  
in the modern  
discipline,

Practice brings  
perfection.

The ignorant  
have been al-  
waies the grea-  
test oppugners  
and traducers  
of the skillfull.

I might have further enlarged my self upon this subject, both in *command* and *figure*; but it may be, that some will finde fault with these which I have already penned, concluding them for *nicities*, and for no service; because they cannot presently apprehend for what use or service they may bee fit. Notwithstanding I would intreat such (if any such happen to bee my overlookers) that they would suspend their censures, untill they have fully informed their judgements. Yet thus much I will conclude with them, that *Counter-marches* might the best be spared of all the *motions*, as being least beneficiall to this our *Moderne discipline*. And yet to very good use, many of them might serve, if our Souldiers were well practised in them. Neverthelesse, such is the wilfull stupidity of the times, that many good and usefull things are disreputed, and accounted of no use, because the Souldiers, wanting skill, cannot performe them as they ought; which, would the *Officers* take more paines, by often instructing their Souldiers, the hardest *motions* would become facile and easie. And to say truth, the greatest fault is want of skill in those which should give instruction to others; and yet they will not stick to carp at such as shall shew more than they, concluding  
such

such things for superfluous and improper, which they themselves doe not rightly understand: But lest I bee taxed for digression, I will conclude this *branch of Discipline* with these few lines following.

**S**ome burthened are with more command than skill,  
Which had they power suting to their mind,  
You then should see reason in thrall'd to will,  
Nor any 'bove their knowledge should you finde;  
For rather then they'l study to learn better,  
They wish all wanting, none to know a letter.

So be there many Officers in Bands,  
That neither know themselves, nor care for those  
That skilfull are in Postures, and Commands,  
Nor are they carefull which end formost goes.  
They thinke, to dice, to drab, to sweare and swill,  
Is skill enough for them, learn more that will.

And if that any man more forward be,  
For to instruct the Souldier (as is fit)  
With such a fellow they cannot agree,  
He is vainglorious, strives to shew his wit;  
They will be sure to quarrell and deprave him,  
And in their cups perhaps they'l ———

Such honest hearts as spend both meanes and time,  
To practice others for their Countries good;  
Why should this good be counted for a crime,  
To those that for their Prince would spend their blood?



*That Countrey sure will best be kept from harmes,  
whose Subjects pleasure take to practise Armes.*

*But on this Subject I'l no longer bide,  
Of Countermarches here I'l take my leave.  
To shew the wheelings next I shall provide,  
VVhich followes next of course, as I conceive.  
And though with verse my Countermarches close,  
Beginning wheelings, I returne to Prose.*

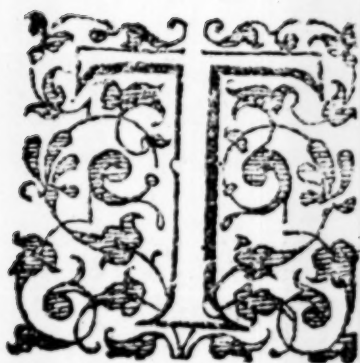
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CHAP.

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CHAP. LVII.

Of wheelings, their kindes and uses, with their  
severall words of Command.



He next Branch springing from  
this roote of *Discipline*, are  
*wheelings*; which are of two  
kindes, viz. *wheelings angular*,  
and *wheelings on the Center*, as  
also they are to be conceived  
in manner of *action*, either *in-  
tire* or *divisionall*: the use of

*intire wheelings* is to turne the aspect of the front pro-  
per to the right, to the left, or reere; either for the gain-  
ing of the wind, Sunne, or some such like advantage;  
or to confront the enemy with their best Souldiers.

Most of the *divisionall wheelings* being indeede Most of the  
divisionall  
wheelings are  
doublings. more properly *doublings*, either extending the  
length or depth of the Battell: notwithstanding,

because I would not be taxed with innovation, or  
*alteration*, I have, according to the usuall received  
way, placed them amongst the *wheelings*; and now  
I will shew their words of Command or direction.

But before I enter upon them, give mee leave to Note that the  
distance for  
wheelings  
ought to be  
three foot be-  
tween rank &  
file. lay downe an observation or two, for the better  
instruction of the Souldiers in their *wheelings*.  
The first is, That before you enter upon your *wheelings*,  
you close both rankes and files to their order, which is

L 3

three

Note that upon the execution of the motions whether it be distance, facing, doubling, Counter-marches or wheelings, the Muskettiers ought to be all upon one and the same posture either poyzed or shouldered; the Pikes in like manner either shouldered or advanced.

three foot both in ranke and file: The other, that upon all wheelings you must be sure to observe your Leader, and follow him, keeping your due distance; your Muskettiers being either poyzed, or shouldered, your Pikes ought to be advanced. The words of Command are as followeth.

Whee your Battell to the	{	Right,	} about,	{	on the same ground;	
		Left,				
		Right,				
		Left,				
	{	Right,	} about,		{	on the same ground;
		Left,				
		Right,				
		Left,				

Whee	{	off your Front by division	{	Right } flanke.		
		your Front inward to the Reere.				
		Front and Reere			{	Left
		into the				
		your flanks into			{	Front,
		the				
Both flanks into the front and reere.						
Your front and reere into both flanks.						

Each following wheeling reduceth the former.

Observe that the first foure wheelings are angular, the next foure are wheelings on the Center, or more properly, on the midst of the front. But all the first eight be intire, the latter eight are all divisionall. You may also observe, that every following wheeling is a reducement unto that which is placed next before it, and the wheeling next before may



may reduce that next following: as to *whee*le your *flanks* into the *front*, if you *whee*le your *flanks* into the *reere*, it is *reduced*; or to *whee*le *front* and *reere* into both *flanks*, if you *whee*le both *flanks* into the *front* and *reere*, they are likewise *reduced*, as before.

For the last eight *wheelings*, which are *divisionall*, I will pricke for each of them his *figure*. As for the first eight, which are *intire*. I conceive them so easie to bee understood, that I may spare the labour; yet I will endeavour to expresse them as well as I can in words: and first I will beginne with the *wheelings angular*, and then with the rest, according to their places: and therfore note, that when you are commanded to *whee*le to the *right*, or *left*, &c. and no other command added, it is to bee understood an *angular wheeling*, and so to bee performed.

## CHAP. LVIII.

### Of *wheelings Angular*.

The Command is,

*whee*le your *Battell* to the *right*.

**T**His is an *angular wheeling*, which transfers the *aspect* or *counenance* of the *front proper*, into that part which was the *right flanke*: It also remooves the *Battalia* from the *ground*

Observe the  
direction for  
angular whee-  
lings.

whereon formerly it stood, and placeth it on that part before the *front*, the *hinge* or *Axelree* of the *motion* is the *right corner man*, or *right hand file-leader*, who with a small *motion* moveth to the *right*, every man, the more his place is remote from the *right Angle*, the more swift must be his *motion*, because his *arch-quadrant*, or *semi-circle* is larger in proportion; wherefore it must be the discretion of the *Officers* so to instruct their *Souldiers*, that when they *whee*le to any *hand*, they may so moderate their *motion*, that they on the contrary *flanke* bee not forced to runne, but so orderly to containe themselves, that they may still preserve an orderly and even *front*. For the *reducement*, *whee*le your *Battaile* to the *left*, in the like manner, as it was wheeled to the *right*; neverthelesse, you must then note, that it will not bring you back into the same ground you formerly stood on; for it hath *advanced* you, the length of your *Battalia*, before the place of your *first front*. But if you would be reduced into the same place, or plot, you first stood on; then face your *Battaile* to the *right*, and being so *faced*, *whee*le your *Battaile* to the *left*, which being performed, *face* to the *left*, and then they are compleatly *reduced*, both for *aspect* and place. The next Command is,

2  
Note the re-  
ducement to  
the first place  
and aspect.

*whee*le your *Battaile* to the *right about*.

3

This is also an *angular wheeling*, and *transferr*es the *aspect* of the *front*, *proper*, towards the *reere*: It is to be performed in the same manner as the *wheeling*

ling to the right was; onely the *motion* is twice so much: wherfore there ought to be the more care had, that so the *motion* may be orderly performed: for by so much as every man is neerer, or further off, from the *right corner* man, by so much the more *swift* or *slow* must he continue his *motion*, that so he may be sure to keepe still, even in *ranke* with his *right hand man*. This *motion* being thus performed, your battell will be removed from its former station, taking in lieu thereof the ground *Diagonally* opposite to the *right Angle*.

Note that wheeling to the right about will not be reduced by wheeling back again to the left about, just into the same ground, if the wheeling be angular, but will be twice the length of the battaille removed to the right of your former standing.

To reduce these to their former *Aspect*, wheele your Battell to the *left about*, notwithstanding the ground you formerly did possesse, will be twice the length of your battell to the *left*, of your *left flank*, if you would reduce them, as well to their first ground, as their first *aspect*, face them to the *right*, and then wheele them to the *left about*, which being done, face them to the *left*, and they are perfectly reduced, as at first.

4

## CHAP. LIX.

### Of wheeling on the Center.

The Command is,

wheele your Battell to the right, on the same ground.

**T**His wheeling is by some called a wheeling on the Center; by others, a wheeling on the same ground. I cannot absolutely maintaine it to bee either, for that it onely wheels about the midst of the first ranke. Neither may it rightly be termed

5



Wheelings on  
the same  
ground quick-  
lier performed  
then angular  
wheelings, and  
in lesse room.

termed a *wheeling on the same ground*, because it lo-  
seth  $\frac{3}{4}$ . of the ground it formerly stood upon. This  
*wheeling* is quicker performed, then the *angular*  
*wheelings*: and may be done in farre lesse ground.  
For the *left flank* *advance* forward, still whee-  
ling to the *right*, the *right flank* contrariwise, *facing*  
to the *left*; and so falling backward. If you have  
an odde File, then the *middle file-leader* must be the  
*center* or *axeltree* of the *motion*, if you have an even  
number of files, then the *middlemost file-leader* from  
the *left*. But if your *wheeling* be to the *left*, then the  
contrary. This by some is called the *Prince of O-*  
*ranges wheeling*. For the *reue ement*, *wheele* your Bat-  
tell to the *left*, on the same ground: and they are  
*reduced* as at first. Our next Command is, to

6.  
Reducement.

*wheele your Battaile to the right about, on the same ground.*

7.


This *wheeling* is also a *wheeling on the center*, or  
*midst of the front*: and *transfers* the aspect of the *front*  
*proper*, towards the *reere*, removing the Battaile  
from the ground whereon it formerly stood, and  
placing it on the ground before the former *front*.  
It is performed after the same manner, as the last:  
onely the *motion* is double so much as the other. In  
this *motion*, on the *left flank*; every man is to observe  
his *right hand man*; and the *right flank* must keep  
even after their *left hand men*, which become their  
*leaders file-wise*, untill they have attained their  
ground: after which, they *face* as before, making an  
*even front*. For the *reducement*, *wheele* your Battaile  
to the *left about*, upon the same ground; and they  
will

Reducement.

will be *reduced* as at first. I will next shew the *divisionall wheelings*, and intend to give to each of them his *figure*: whereby they may appeare the more easie to such as do not yet rightly understand them. The first shall be a *wheeling off by division*: as in the next Chapter.

## CH A P. LX.

*Of wheeling off, by division.*

 His *wheeling off by division* in greater Bodies, may be usefull to meet severall enemies at one and the same time with the Front of your Battalia: and so consequently with your best Souldiers. By this *Motion* also the *Muskettiers* marching in front, may be *wheeled off by division*, to flank their *Pikes*: But if you would *wheele off* your *Battaille* by *division*; and again *conjoyne* them (when the *file leaders* are come to the *reere*) then it brings all your *Muskettiers* from the *flanks* to the *midst* of your *Battalia*: and the *Pikes* on the *outside* or *flanks*. If any question the *depth* of the *number* of this Figure, I have *doubled files* to make the Figure more perfect, as you may perceive by the following Figures

The

The Command is,  
*wheele off your front by Division.*

First Front.



Reere.

Note the Direction, the wheeling is angular, the Motion to be performed wheeling about the outmost file leader on each flank.


The way to perform this *Motion*, is easie; for all the *file leaders* of the *right flank*, *wheele about to the right*: the rest of each *file* following their *leaders*: the *file leaders* also of the *left flank*, *wheeling about to the left*, in the same manner; and then *joyne* or *close* their *divisions*. This being done, if you would then *reduce* them, *wheele* them off again by *division*, after the same manner; and they will be as before. But if you would do it some other way, make use of this *wheeling* next following: which will also bring them as they were. The word of Command or Direction followeth, as in the next Chapter.

CHAP.



## CHAP. LXI.

*Of wheeling the front inward towards the Reere.*

 *Heeling your front inwards to the Reere, is here placed as a reducement unto the preceding wheeling: and brings the Muskettiers to the flanks again. Nevertheless if you would do it, the Company being first reduced; then it brings the Pikes to be the flankers. Some have conceived that it may prove usefull at any time, when your reere shall be too much overlaid by the enemies Cava'lrie: having first gained some hill side, or other place of advantage for then by this wheeling of your front inward to the reere, (which to the enemy will make shew of disbanding, or flight: But to the contrary,) your Battell marcheth towards them, with a settled and orderly Body, with all your Muskettiers in the midst. In that order firing upon the enemy; the Pikes being the flankers: thereby defending the flank of your shot from the furie of the Horse. The Figure as in motion followeth.*

The

The Command is,  
*wheele your front inward to Reere.*

The Front.



*This was the Front.*

The Instruction  
 how to perform  
 the Motion.

This *Motion* will hardly be well done, if your body hold too large an extension of length. But at what depth soever it is easie. The *Motion* is to be performed as followeth. The *right hand file-leader*, with all the leaders of the *right flank* advance forwards, and so *wheele* about to the left: every file still keeping close to their *right hand file*. The *left hand file leader*, likewise, with all the leaders of the *left flank*, advance forwards, and *wheele* about to the right: every file of the *left flank* closing close to the left. Thus the *outmost files* of each flank, will meet and become the *innermost*: the front falling perpendicularly to the *reere*. For the *reducement* of this figure, you may if you please, either *wheele* them off to the *right* and *left*, by *division*: or else *wheele* your front inward again to the *reere*. These two last *wheelings* have been demonstrated with their  
 files

The Reducement.

files doubled:whereby the figures might be the more perfect, but with men it would have been need-  
lesse:wherefore *doubleranks* to the contrary hand,  
and they will be as at the first.

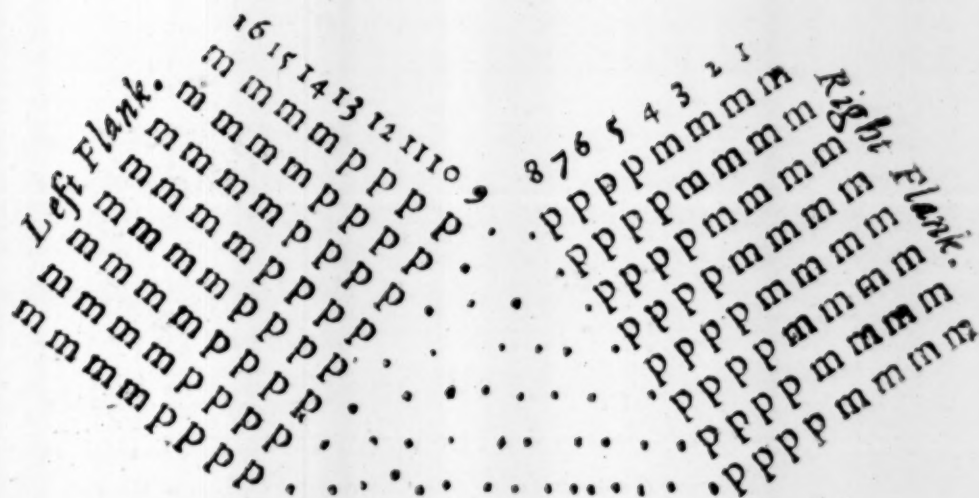
# CHAP. LXII.

*Of bringing the Flanks into the Front of the Battell.*

The Command is,

*Wheeleyour Flanks into the Front.*

Front.



Rear.

Wheeleyour	{	Flanks	}	into the	{	Front,
		Wings				Front,
		Front				Battell,
		Front				Midst,
		Rear				Center,
		Flanks.				

This



This wheeling  
most properly  
a doubling.



Sixteen a breast  
allowing to  
each man 3.  
foot, amounts  
to 48. foot.

The Reducement.

His divisionall wheeling of the Flanks into the Front, is, properly, a doubling performed by wheeling. It brings all your Muskettiers from the flanks into the front. So that whereas this body, before, could do execution, but with 8. Muskettiers at once; by this Motion they may powre on 16. shot together. If they were deeper before the Motion began; then it would bring the more hands to employment. If upon some passe you should be chased in the Reere by Horse; by this Motion of wheeling your flanks into the front, you not onely secure your Muskettiers, but also barricado up the passage with your Pikes; provided it be not above fifty foot over. Some call this, a wheeling on the center: because they wheele about the middle-men of the front. But I rather conceive it an angular; because upon the first motion of dividing, every division wheeleth about his own angle, untill the outmost file-leaders of each flank, meet together in the midst. You may perceiue how, by the figures of number, where the figure 1. meets the number 16: 2 with 15, 3 with 14. and so for all the rest. Then being faced to their leader, every two files that met being now joyned, make one rank. There must be the like order and decorum kept, in the motion of wheeling each flank: as I shewed in the instruction of intire angular wheelings. For reducement of this Motion, wheele your flanks into the Reere. Or else, foure times the same, as I have seen some do: although somewhat the further way about. Divers men are diversly opinionated; concerning the best word of Command

mand or direction for this *Motion*. These I have known used which I have placed in the *Margine*, by the *figure*. And if any man like one better than the other, be it at his own choice, either to use or refuse, while I passe to shew the next *wheeling*.

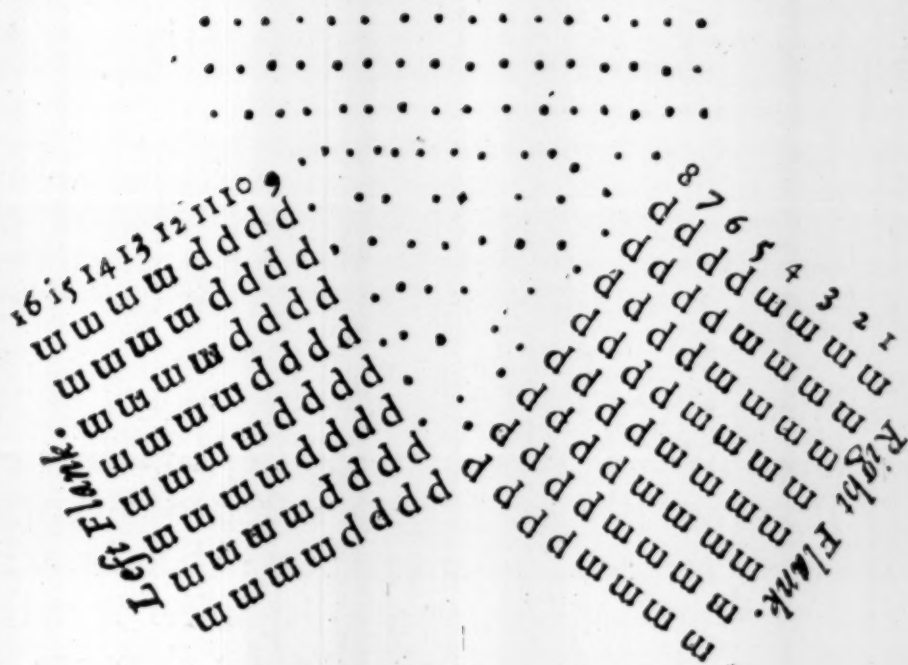
CHAP. LXIII.

*Of wheeling the Reere into the midst of the Battell.*

The Command is,  
*wheeleyour flanks into the Reere.*

The Direction is,  
*Face all about to the right.*

*First Front.*



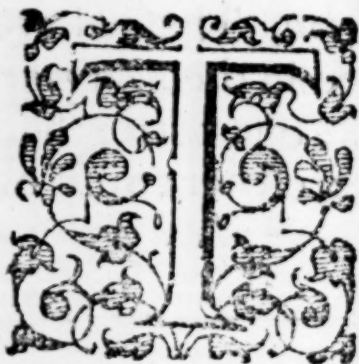
Wheel your	{	Flanks	{	into the	{	Reere.
		Wings				Reere.
		Reere				Battell
		Reere				Midst,
		Front				Center,
						Flanks.

*Front Accidentall.*

M

This

Vpon all wheelings, you must observe to follow your leaders, which must be understood, as well of those which become leaders accidentally (by reason of facings) as of those which be the first and proper leaders. As in this wheeling for example: where the bringers up are become the leaders of the Motion.



Note that the two middlemost bringers up are the hinges of this wheeling.

His *divisionall wheeling* of the *Flanks* into the *Reere*, is also a *doubling*, & performed as the other. And whatsoever might be said in the behalfe of the *wheeling* of the *Front*, into the *middest*; the same may be also spoken concerning the *wheeling* of the *Reere* into the *middest*. For this *wheeling* brings your two *outmost files* to bee the *first ranke* to the *reere*; the *bringers up* of the *right* and *left hand files* meeting together: the *bringers up* of the *right Flanke* meeting *face to face* with the *bringers up* of the *left flanke*. And so being *faced* to their *leader*, they which before were *compleat files*, are now become *halfe ranks*, either to the *right* or *left*. But you must note, that before you beginne to *wheele*, you must *face* your *body about* to the *reere*: and then the *action* will bee all one, as if you *wheeled* your *flanks* into the *front*. Wherefore I shall not need further to explaine it, having spoken fully to it in the precedent *Chapter*.

For the *reducement* of this *wheeling*, the *Commander* being at his *front accidentall*, may command them to *wheele* their *wings* into the *reere*; and so passe through to that part where his *proper file leaders* are; and then *face* them to him, and they are *reduced*. Or else, when he hath past through to the *reere*, and *faced* his *Company* to him; then his *pikes* being *formost*, let him *wheele* his *flanks* into the *front*: who going *faced* to their *leader*, they are *reduced*. For this *motion*, there are also divers and severall



verall words of command. And because it may be that some wil better approve of some of the other words of command, then of this that I have made use of: therefore I have placed others in the margin; that so any that will may take their choice, while I passe to shew the next *wheeling*. Whose word of *Command* and *direction* you shall finde over the *figure* of the next *Chapter*.

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M 2

CHAP.

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## CHAP. LXIIII.

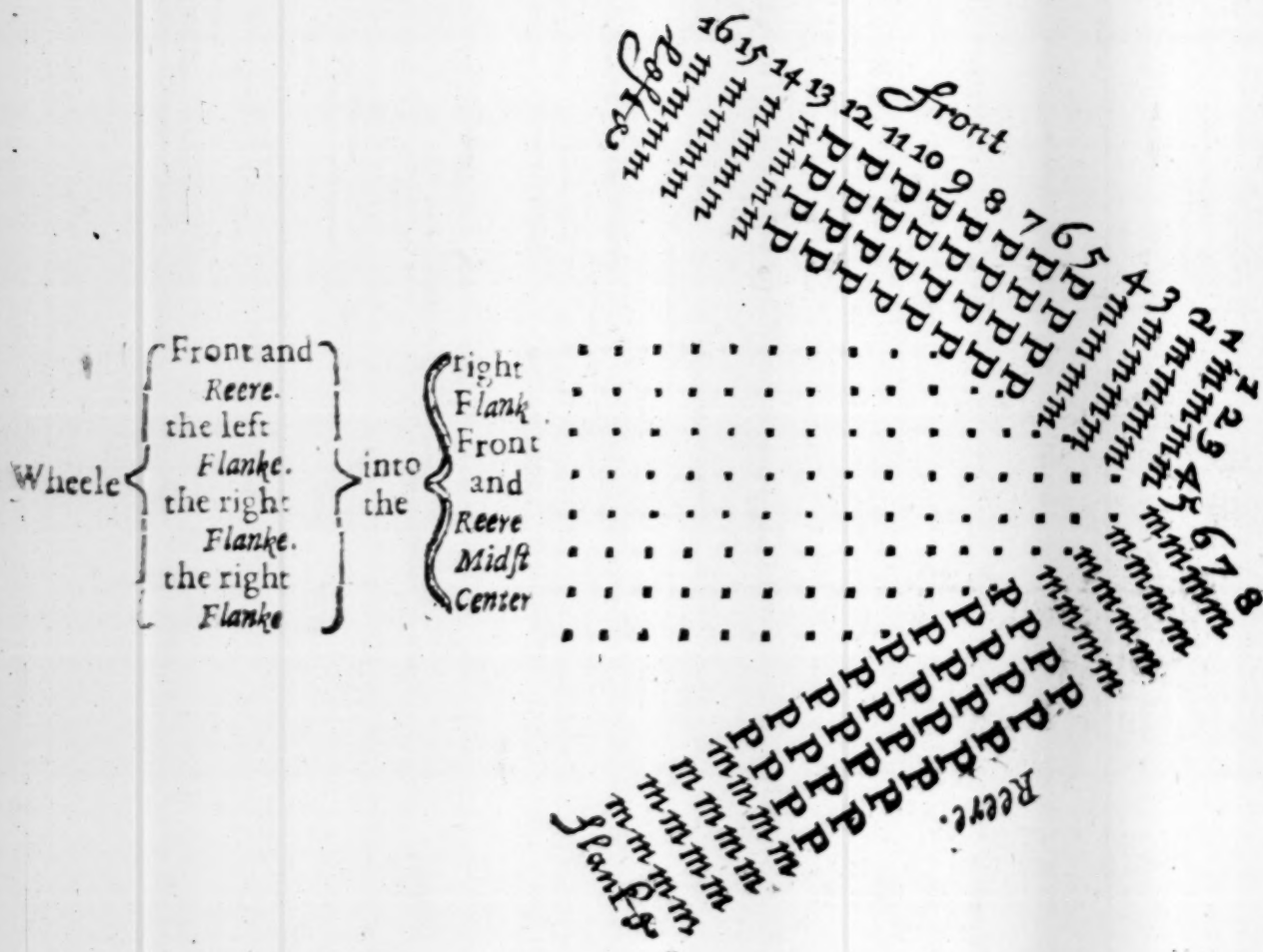
*Of wheeling the right flank into the midst  
of the Battell.*

The Command is,

*whee le front and reere into the right flanke.*

The Direction is,

*Face all to the right.*



This Figure shews as the body is in motion.

This



His *divisionall wheeling* of the *Front* and *reere* into the *right flanke*, doth *quadruple* the *depth*; as may appeare by this *figure*; which before the *Motion* began contained but *eight* in *depth*: But this *wheeling* being perfected, makes them 32. namely, if you direct the *aspect* of the *body* either to the *right* or *left*, after the *Motion* is ended. If you observe this *wheeling*, it doth divide the *Muskettiers* on the *left flank*; the one *halfe* of them *wheeling* to the *front*, the other *halfe* to the *reere*: all the *Muskettiers* of the *right flank* *wheeling* together into the *middest*. The *Pikes* are likewise divided; those that were the *front half files* are in the *middest* of the *front division* of *Muskettiers*, and those which were the *reere division* of *Pikes* are in the *middest* of the *reere division* of *Muskettiers*. This *wheeling* may be to singular good use, for the making of some *formes* of *battell*. But I forbear now to treat concerning *figures* and *formes* of *battell*, reserving them to bee spoken of in their due places; and come now to shew the way how to performe the *Motion*. The *Command* therefore being given, to *whee* *front* and *reere* into the *right flank*; then the first thing the *Souldiers* are to do, is to *face* to the *right*. That done, they *whee* together about the fourth and fift men in the *right hand file*; which is the *halfe file leader* to the *front*, and *half file leader* to the *reere*. You may easily perceive how by the *figure*, where the *reere division* *wheel*eth to the *left*, and the *front division* to the *right*: untill the *bringer up* of the *right hand file* meets in

Note that if the length of your Battell be double the number of your depth, as in this figure; then this wheeling of front & reere into the right or left flank, doth quadruple their former depth. If the number were equal in length and depth, then by this wheeling they would be but doubled. If the number of your length exceed more then double your depth, by so much the more will the extension of the depth be beyond quadruple, &c.



the *midst* with his *file-leader*: the *second* with the *seventh*; the *third* with the *sixth*; the *fourth* with the *fifth*, &c.

Reducement.

For the *reducement* of this *figure* of *wheeling*, there are many waies, according as the *body* may be *faced*. But first conceive them *faced* the same way as they were before this *motion* began. And then the *wheeling* of *front* and *reere* into the *left flank* will *reduce* them, when they are *faced* to their *leader*. Or if you will, *face* them that way which they *wheeled* in the *motion*; which was to the *right*: then *wheele* your *flanks* into the *reere*; when being *faced* to their *proper front*, they are *reduced*. And so, in like manner, should you *face* them to some other part; they might be otherwise *reduced*. The next *wheeling* will be the same to the *left*, as this is, to the *right*: where, notwithstanding that the *motion* bee all one, yet it shall differ in the *placing* of the *men*. For before I beginne the *wheeling*, I will passe through all the *Muskettiers*, from the *left flanke* to the *right*: by which meanes the *body* will stand, as appeareth by the *square figure* following under *A*. From whence I will beginne the next *wheeling*.

Wheelings may be diuersly reduced: at the discretion of the Commander.

The

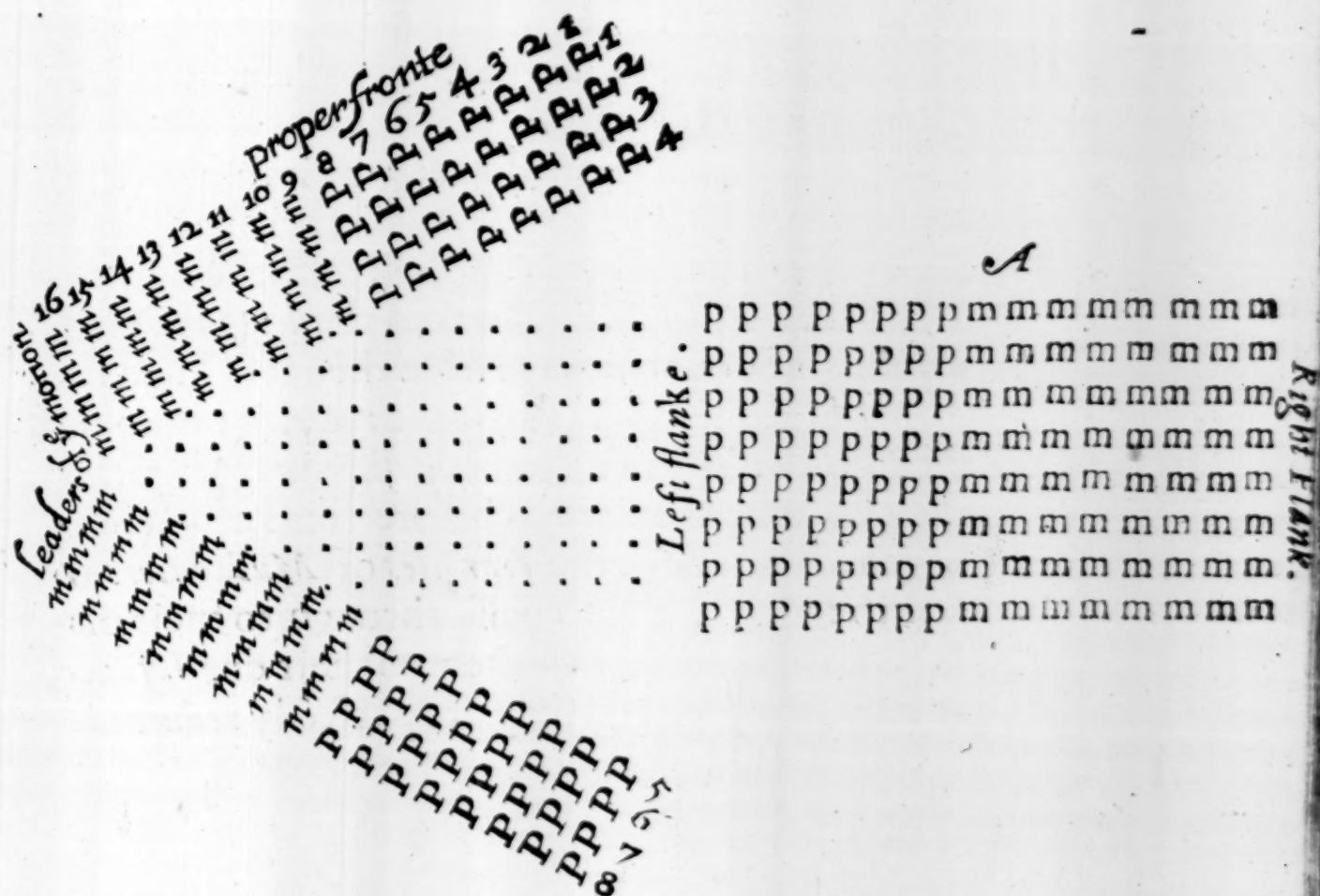
CHAP. LXV.

*Of wheeling the left Flanke into the midst  
of the Battell.*

The Command is,

*Whee Front and Reere into the left Flank.*

The Direction is,  
*Face all to the Left.*





His *divisionall wheeling* of the *Front* and *Reere* into the *left-flanke* is, in like manner, a *doubling of the depth*. For the nature of the *Motion*, it is altogether like unto the *wheeling* next before: differing onely in the *flanke*; and after that the *body* is *faced* to the *left*, the *wheeling* is to be performed, as *wheeling* the *flankes* into the *front*. But by reason that before the *Motion* began, all the *Muskettiers* were on the *right flank*, by this *wheeling* they are brought to the *front* and *reere*. For the *Aspect* being directed the same way, it was before the *Command* was given, the depth will be 32. as in the other *figure*.

For *reducement*, the ordinary way is to *wheel* the *front* and *reere* into the *right flank*. Or if upon any occasion you have *faced* your *body* to the same way they have *wheeled* (which was to the *left flank*) and would give your *command* from thence; Then let them *wheele* their *flanks* into the *reere*. This done, the *Commander* passing to his *first front*, and *facing* them to him, they are as before this last *wheeling* began. Then cause the *four files* of *Muskettiers*, to *face* to the *left*; and to *pass* through to their places. Lastly, do but *close* them to their due *distance*, in *rank*, and *file*: and they are perfectly *reduced*.

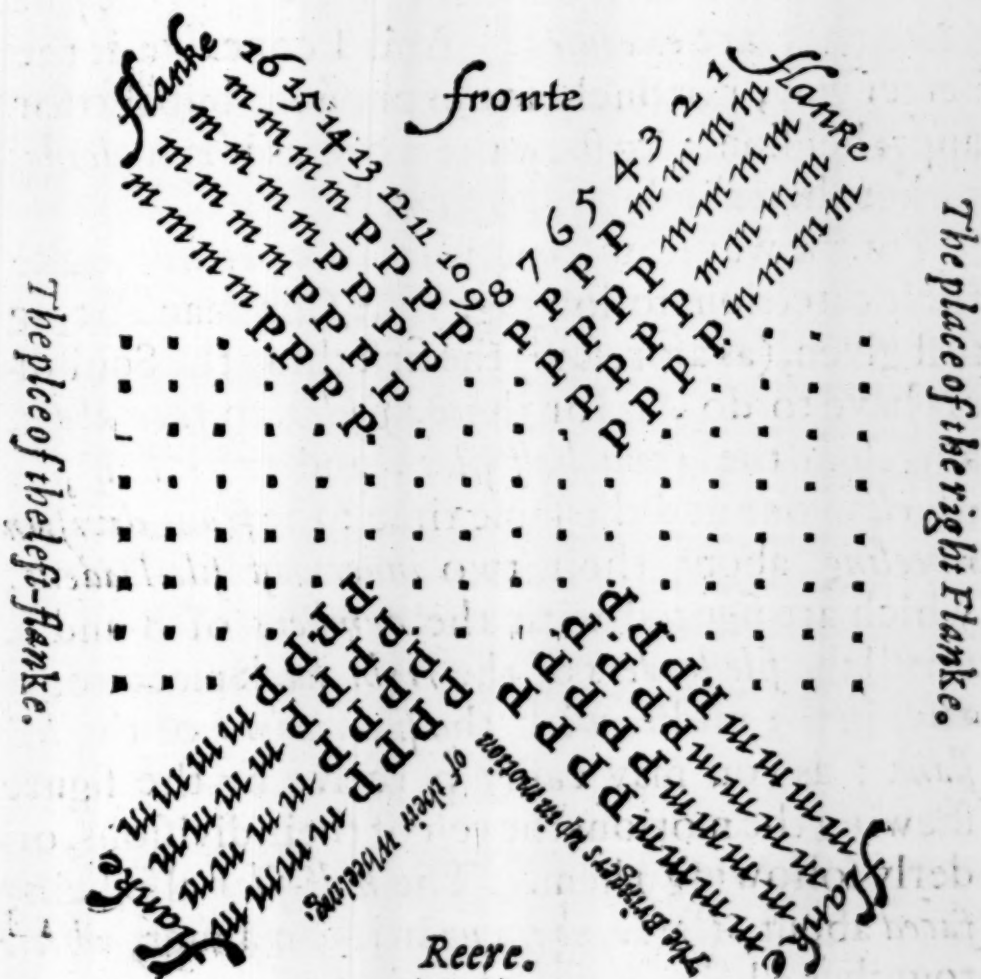


CHAP. LXVI.

Of wheeling Front and Reere, into the midst  
of the Battell.

The Command is,  
wheele both Flanks into the Front and Reere.

The Direction is,  
Half-files, face about to the Reere.



This



His *divisionall wheeling* of both *flanks* into the *front* and *reere*; doth double the *depth*: making them from 8. deep, 16. It doth likewise transferre the *Muskettiers*, from the *flanks* into the *front* and *reere*: making a division between the *front half files*, and *reere half files*. So that of one *body*, *flankt* with *Muskettiers*, it maketh two, each having their *Muskettiers* in *front*.

This *figure* (and most others; as well *facings*, *doublings*, *counter-marches* and *wheelings*) are here set forth as the *motion* of each presents it self in the *execution*; few of them being shewn, as they be when they are *executed*. And I conceive it the better way, not onely for expression, but also for apprehension: to shew the work as it is in *doing*, rather then absolutely *performed*.

The direction  
to this whee-  
ling.

For the way how to perform this *wheeling*, take these directions following. The Command being first given, (as aforesaid) the first thing the *Soul* di-ers have to do, is for the *half files* to *face about*, and then the *front half files*, and *reere half files* *wheele* at one and the same time: the *front division* *wheeling* about their two *innermost file-leaders*, which are figured with the *numbers* of 8 and 9. untill the *file leaders* of the *right flank* meet together in the midst, with the *file-leaders* of the *left flank*: as you may easily perceive by the figure shewing the *motion*; the rest of their divisions, orderly following them. The *half-files* also being *faced about*; the *bringers up* in like manner, *wheele* together: being now the *leaders* of the *motion*, in  
the

thereere, as you may perceive. This being done, if you please you may *face* them all to their *leader*, (whom suppose to be at the *place* of his first *front*) and then command them to close their *divisions*: which being performed, all your *file-leaders* are in the two *innermost* files of the *front division*, *file-wise*, and all the *Bringers up* in the *reere division* of the same *files*.

For the *reducement* of this *wheeling*, if you will, *face* them to either of the *flanks*, and command them to *wheele* both *flanks* into the *front* and *reere*, then *face* them again to their proper *front*, and close their *divisions*, they will be as at first. But if you would make use of some other *wheeling*, to *reduce* it, then take this in the following Chapter.

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CHAP.

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## CHAP. LXVII.

*Of wheeling the flanks into the midst of the Battaille.*

The Command is,  
*wheele front and reere into both Flanks.*

The Direction is,  
*Face to the right and left.*



**T**His *divisionall wheeling* of the *front* and *reere* into both *flanks*, may also be termed a *doubling of the depth*: by reason that from 8. deep, it maketh double the former number. By this motion also, the *Musketiers* which before were *flankers*, are now transferred into the *midst*, between the *front* and *reere* of the *Pikes*. And whereas in the other figure, the *wheeling* was about the two *middlemost file-leaders*, and *bringers up*; this *wheeling* contrariwise, is about the two *half file-leaders* of the *outmost files* over each *flank*. In the other *wheeling*, the *file leaders* and *bringers up*, made the *innermost files* in this, the *outermost file* of each *flank*, as you may easily perceive by the figure. This motion being performed, leaves a large *Intervalle* (or *division*) from *front* to *reere*, between the *flanks*: if the *Commander* passe into the *midst*, between each *division*, and face them all to him; causing them to close their *divisions*, and march forth into his first place, (directing their *aspects* the same way) then will the *Pikes* be in the *front* and *reere*.

For the *reducement* of this Figure (of *wheeling*) Reducement. to its former posture; you may face the *body* to one of the *flanks*. Which being done, command them again to *wheele front and reere into both flanks*, when being faced to their former *front*, and having closed their *division*, they are reduced. Nevertheless if you would make use of some other *wheeling* to reduce them, then *wheele both flanks* into the *front* and *reere*; and they wilbe as at first, after that they have faced to the *Leader*, and closed their *divisions*. Thus as briefly and as plainly as I could

could have I runne through the severall *motions* and *grounds*, for the *disciplining* of a foot company. And although I neither can, nor hope to give satisfaction to all; yet I shall intreat the better qualified, that where I am wanting, there they will supply my defects with their goodnesse. Or if it so happen, that I undergoe the censure of needlesse superfluitie: I would have such to make use of so much of it, as they shall think fit for their own turns, and to leave the residue unto such as may have opportunity for to use it.

---

**T**Hus Courteous Reader have I past the grounds  
 And various motions of the Infantry,  
 where thou maist gain the skill cost others wounds,  
 Though from a young one of th' Artillery.  
 Read and consider, if thou nothing gain,  
 I ask as little from thee for my pain.

If thou the Distances dost well peruse,  
 The severall Facings and the Doublings too,  
 The Counter-marches which of course ensues,  
 And then our wheelings which we lastly do.  
 These being practis'd, learn'd, and understood,  
 The benefit turnes to thy Countries good.

These, like the vowels, are in number five,  
 with which we spell all words that can be nam'd:  
 So with these motions we all formes contrive,  
 And from these grounds are all our Figures fram'd.

Then



*Then frame thou no excuse, but learn to know them  
And with as free an heart as I do shew them.*

*Now next of all I should some firings show,  
But lest perhaps I hold you over long,  
I think it fit some respite to bestow,  
For feare our Souldiers think I do them wrong,  
So please the Reader but to pause the whiles,  
And see our Leaders exercise their files.*

*For now each Leader is so courteous grown,  
He strives to bring another to his place.  
But they as modestly would keep their own,  
And each prefers his follower to the grace.  
So please you then but wink at the digression,  
And you shall see each Leader by succession.*

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CHAP.

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## CHAP. LXVIII.

*Of making men file leaders successively, the files being eight deep.*



Every Man may be made *file leader* of his own *file successively*, according to his *first standing*, as well and easily in *great Bodies*, as by *single files*. Yea and with the same words of *Command* and *Direction*, as you may perceive by the following *Table*, where the *Figures of number* shew the *succession* of each mans *leading*. The words of *Command* which produce each *leader*, being placed in the *Columes* of the following *Table*. In the first *Colum*, the *file stands* each man in his right place; with his *proper file leader* in *front*. The rest of the *files* demonstrating the *places* of the men, according to their *standing*; upon the making of every severall *file leader*. The *Commands* are *figured*: which produce the like *leaders*.

---

The

The front of each file as they come to bee file-leaders successively, with the numbers and places of the men figured according to their proper places they first stood in.

8	7	6	5	4	3	2	1
7	8	5	6	3	4	1	2
6	5	8	7	2	1	4	3
5	6	7	8	1	2	3	4
4	3	2	1	8	7	6	5
3	4	1	2	7	8	5	6
2	1	4	3	6	5	8	7
1	2	3	4	5	6	7	8

The severall words of Command, which produce each File-leader.

<p>Ranks } to the right double } makes the</p> <p>Files } File leaders and halfe file leaders stand; the rest passe thorow to the right; and place your selves before your leaders: }</p>	2
<p>Ranks } to the left double } makes the</p> <p>Files } First rank stand; the rest passe thorow to the left, and place your selves before your leaders; }</p>	3
<p>Ranks } to the right double, } makes the</p> <p>Files } Countermarch front and reere into the midst, and then face to the first front; }</p>	4
<p>Ranks } to the left double } makes the</p> <p>Files } Then face about, or Countermarch the front into the reere, and they are reduced.</p>	5

N

This



The first are the *proper leaders* of the *files*. For to make the second *leade*, if there bee but one *file*, then *file ranke* two to the *right*: if there bee more *files*, then *rankes* to the *right*, *double*, and *files* to the *right*, *double*. By which meanes, the second man is become *leader* of his *file*; every man being disposed, as you may perceive by that *file*, whose *leader* is the *figure* of 2. To make him that was the third man, *leader*, let *file leaders* and *halfe file leaders* stand, and the rest passe through to the *right* and place themselves before their *leaders*. Thus will the *file* stand like that, led by the *figure* of 3. For to make him that was the fourth man *leader*; *Ranks* to the *left*, *double*; and *files* to the *left*, *double*: whereby the *file* will stand like that, led by the *figure* of 4. For to make him that was the fifth man *leader*, let the *first ranke* stand; the rest passe through to the *right*, and place themselves before their *leaders*; by which meanes the *file* will stand like that led by the *figure* 5. For to make him that was the sixth man, *leader*, double your *rankes* to the *left*, and *files* to the *left*; *double*: and then the *file* will stand like the *file* led by the *figure* of 6. For to make him that was the seventh man, *leader* of the *file*, *countermarch front* and *reere* into the *midst*, and *face* them to the former *front*; whereby the *file* will stand like that led by the *figure* of 7. For to make him that was the eighth man, *lead* the *file*: *rankes* to the *left* *double*, and *files* to the *left* *double*; and the *file* will stand like that led by the *figure* of 8. For to *reduce* them, cause the first *rank*

to stand; the rest to advance forwards to the right, placing themselves before their leaders.

CHAP. LXIX.

*Of making men file-leaders successively; the files being but sixe deepe.*

**S**ome will bee inquisitive to know for what use the *making of leaders by succession* serveth? or whether it be not a meere Curiosity? To which I thus answer. That it is not onely pleasant, but profitable. Pleasant to the leader of a file; who having sufficiently exercised his file in postures, to give some time of respite, or delectation for the recreating of their (almost) tired spirits, brings each man, successively, to lead the file by proper words of command. And lastly, reduceth each man to his former standing. It must needs bee profitable, and much available in Discipline, when the skilfull Commander can thereby (with much ease) change and interchange: bring what ranks he pleaseth to lead in front; and exchange them afterwards for others; yea, and lastly, at his own pleasure, bring the proper file-leaders againe into their places. This following Table shewes each mans severall place, and how they stand upon every mans comming to be made file-leader; still suffering alteration, according to their various leaders;

demonstrated heere by the figures of Number (which are placed at the bottom of those Columns, wherein are writ the words of *Command*) understand that those words over the *figure* of 2, are to make the second man *file-leader*. Those words over the *figure* of 3, make the third man *leader*. And so forwards for the rest, as in the Table.

*The*



*The Front and standing of each File as they come to be Leaders.*

6	5	4	3	2	1
5	6	5	2	1	2
4	3	1	6	4	3
3	4	6	1	3	4
2	1	2	5	6	5
1	2	3	4	5	6

*The words of Command which produce each severall Leader.*

Files	Ranks	Files	Ranks	Files	Ranks
Half files double your front to the right, and files to the right double.	Files } to the left double }	File leaders stand; the rest pass thorow to the right, and place themselves before their leaders	Files } to the right double }	File leaders stand; the rest pass thorow, and place yourselves before your leaders.	Files } to the left double }
2	3	4	5	6	1

N 3

The

The *first man* is the leader of the file. For to make the *second man* leader, *Command, file ranke, two to the left*. If there be more files than one, *rankes to the left, double; and files to the left, double; which makes the second man leader: every man in the file being disposed, as you may perceive by that file, led by the figure of 2*. For to make him that was the *third man* leader, *command halfe files double the front to the right; and files to the right, double; by which meanes, the file will stand like that, led by the figure of 3*. For to make him that was the *fourth man* leader; *face to the Reere, and then hee leads*. But if you will keepe the same front, *command the first ranke to stand, the rest to passe through to the left; placing your selves before your leaders*. Thus will the file stand like that, led by the figure of 4. For to make the *fift man* leader, ; *command, rankes to the right, double: and files to double their depth to the right intire: by which meanes the file will stand like that, led by the figure of 5*. For to make the *sixt man* file-leader, *cause rankes to the left, double; and files to the left, double; and then the file will stand like that, led by the figure of 6*. For to reduce them, there needes no more but *face to the reere: notwithstanding, if you would have the front the same way, the Command is, first ranke stand; the rest passe forwards to the right; placing your selves before your leaders*.

Reduement,

For

*For to make sixe men successively Leaders, by sixe words of Command, besides Facings.*

The first is leader: for the second file, *Ranke 2. to the left, and files to the left, double.* For the third, *Countermarch front and reere into the midst, and face to that part which was the reere.* For the fourth, *face about to the right.* For the fifth, *Countermarch front and reere into the midst, and face to that which was the reere.* For the sixth, *file, rank two to the right, and files to the right, double; face them about, and they are reduced.*

## CHAP. LXXII.

*Of making men file leaders successively, according to their precedencie and dignity in file.*



Having already demonstrated to Tables, for the making of men file-leaders successively. Let it not bee held impertinent if I present two others unto you; wherein I shal deliver the way of making men file-leaders, according to dignity. Snarling Cynicks, I know, will carpe at my curiosity; but studious Souldiers will praise my industry. Men naturally are not inclined to practise any thing, wherein they find not either profit or delight: few men by the practise of armes, makes \*profit. If then

\* What fortunate profits Souldiers have made by following this Art, reade *Ravleights hist. of the world, l. 5. c. 6. Sect. 3.*



the *aines* of *honour* may be first attracted, with the various delights which are found in the study and practice of the *Art Militarie*. Why should any grutch the gilt to the wholesome Pill (which makes it the more readily and willingly received?) Or why should any hinder the meanes whereby *Souldies* may be built up with delight. Seeing that the benefit redounds to the Reputation and honour of our Countrey Thus much upon mine owne knowledge. I have seene some so preposterous, to all conceit of *Souldiery*: that they have shunned it with as much care as thrifty husbands doe beggerie. Yet casually hapning, to see the *exercise of a single file*, have been so taken with some conceipt or knacke, that without any further aime, they have taken *Armes*: Wherein by their practice and *industrie*, they have attained so much *proficiencie*, that now they are knowne excellent in many parts of the *art Militarie*. Nor hath their flowring buddes beene any way privileged, or might escape those private & frosty nips from aspersionating tongues; a fault too common and customarie in many, to despise the vertue of those, whom they have knowne raw novices in that *Art* and *faculty*, wherein themselves have been noted any thing extraordinary. But lest I be censured to be over tart or tedious, I returne to the worke of this Chapter: which is the making *men file-leaders in dignity*.

Each mans *dignity* and *worth*, with the reasons thereof, are at large set forth in the fourth and fift Chapters of this Book. The *Table* followeth: wherein is declared every mans dignity: and the words to make them *file-leaders* accordingly, &c.

*File-*

File-leaders by dignity.

The proper file-leader.	The Bringer up.	The halfe file leader.	The Bringer up of the front half-file.	The second man from the front.	The second man from the reere.	The next after the halfe-file leader.	The third man from the front
1	2	3	4	5	6	7	8
5	6	7	3	6	2	3	7
8	7	6	8	1	3	2	4
4	3	2	7	2	7	6	3
3	4	1	5	4	5	8	1
7	8	5	6	3	1	4	2
6	5	8	1	8	4	2	5
2	1	4	2	7	8	5	6

The severall words of Command, which produce each File-leader.

1	2	3	4	5	6	7	8
File-leaders stand; the rest passe thorow to the right, and place your selves before your leaders.	File-leaders and halfe file leaders stand; the rest passe thorow to the left; and place your selves before your leaders.	Bringers up double your front to the right and files to the right double.	Front and reere halfe files interchange your ground.	Rankes to the left double; then, files double your depth to the left.	File-leaders and halfe file-leaders stand; the rest passe thorow to the right, placing your selves before your leaders.	Halfe files double your front to the left; then files to the left double.	The words of Command, to reduce them to their former places, are plac'd beneath this Table.

The Reducement.

1. Front and reere halfe files interchange ground
2. Rankes to the right double.
3. Bringers up face about to the left, and march into your places.

- A. 1. File-leader. The file-leader is the A. *chiefest man in dignity*; and first leader of the file. To make the B. second man in dignity file-leader, (command) file-leaders stand, the rest passe through to the right, and place your selves before your leaders. To make the C. Third man in dignity file-leader, (command) file-leaders, and halfe-file-leaders, stand; the rest passe forwards to the left, and place your selves before your leaders. To make the D. Fourth man in dignity file-leader, (command) Bringers up double your front to the left, and (that being done) files to the left, double. To make the E. fifth man in dignity file-leader, (command) front and reere half-files interchange ground; and then, face as before. To make the F. Sixth man in dignity file-leader, (command) file, ranke 2. to the left, (if it bee a single file: but if you have more files, then command, ranks to the left double) and files double your depth to the left. To make the G. seventh man in dignity file-leader, (command) file-leaders, and halfe-file-leaders stand; the rest passe forwards to the right, placing your selves before your leaders. To make the H. eighth and last man in dignity file-leader, (command) halfe files double your front to the left. (That done) files to the left, double. This being performed, every man hath successively beene the leader of his owne file: according to his *dignity* therein. The *reducement* is placed at the lower end of the *Table*.
- B. 2. Bringer up.
- C. 3. Halfe-file-leader.
- D. 4. Bringer up of the front halfe-file.
- E. 5. The second man from the front.
- F. 6. The next before the Bringer up.
- G. 7. Next after the halfe-file-leader.
- H. 8. The third man from the front.



## CHAP. LXXI.

*Of making men file-leaders by dignity, the files  
being but 6 deepe.*



Any waies there be, to make men file-leaders, either successively, or by dignity in one single file; which cannot so easily (nor so properly) be performed with a whole Company (or larger Body) and therefore neither proper nor usefull. Such waies onely being fit to be practised, as will sute with any number, the depth only reserved, which I have here undertaken for 6 deepe. The following Table demonstrates their number of dignity; and the succession of each mans comming to leade in front; as also each mans place upon the alteration of every leader, and severall word of command. Beneath each Columnne is placed the words of command, to produce the next insuing leader. Last of all is the reducement.

## Succession of leading in Dignity.

6	5	4	3	2	1
2	4	5	6	6	5
1	3	1	2	3	4
3	1	3	4	1	3
4	2	6	5	5	6
5	6	2	1	4	2

Number of Dignity.

## The words of command which produce each file-leader.

1	6	5	4	3	2
The words of command to reduce them are beneath this Table.	File leaders stand; the rest pass thorough to the left, and place your selves before &c.	Rankes to the right double; and files to the right double.	Front and reere halfe files interchange ground.	File leaders and halfe file leaders stand; the rest pass thorough to the left, and place your selves before your leaders.	Bringers up double your front to the right; files double your depth to the right.

## The Reducement.

Rankes to the left } double.  
 Files to the left }  
 Halfe-files double your front to the right.  
 Bringers up face about to the right, and march forth into your places.

Although

Although the *Table* it selfe were sufficient to instruct the desirous; yet for the cleerer demonstration, take these further instructions.

A. The first rank or the file-leaders of each file are the first and chiefest men in dignity; every one in his owne file. To make the B. second ranke in dignity file-leaders, (command) *Bringers up double your front to the right*; (and then) *files double your depth to the right*. To make the C. Third rank in dignity file-leaders, (command) *file-leaders, and halfe-file-leaders, stand*; the rest passe thorough to the left, and place your selves before your leaders. To make the D. Fourth ranke in dignity file-leaders, (command) *front and reere halfe-files interchange ground*. To make the E. fifth rank in dignity file-leaders, (command) *rankes to the right double*; (and) *files to the right double*. To make the F. Sixth and last ranke in dignity file-leaders, (command) *file-leaders stand*; the rest passe thorough to the left, and place your selves before your leaders. The *reducement* is placed beneath the *Table*.

A. The file-leaders.

B. Bringers up.

C. Halfe-file-leaders.

D. Bringers up of the front halfe-files.

E. The second ranke from the front.

F. The second ranke from the reere.



## CHAP. LXXII.

*Of drawing the files againe into a body, and preparing them for skirmish.*

Vpon the first summons of the Drumme, every file leader is to draw forth his file (whether he be exercising th<sup>m</sup> in posture or motion) and to repaire to his rendezvouz or Colours.



Y this time (me thinks) I heare the Drummes beat a Call; which summons each file-leader to his place: every man observing his order, both in ranke and file. The Officers having taken their due places:

the Captaine and Ensigne in the front of Pikes, the Lieutenant in the reere; the Serjeants on the flanks; the Drummes on the front and reere Angles of the Pikes: as you may perceive by the square figure following.

Distance in ranke and file is to be understood between ranke and file, not as some would fondly wrest it,

Now the Drummes beat a March, the Ensigne flying at the head of the Pikes; the Pikes and Muskets shouldered, marching at their distance of order \* in file, at open order in rank; presently by a signe from the Captaine, the Drummes beat a preparative: the Pikes advance, the ranks close forwards to their order; the Muskettiers make ready, and every man prepares himselfe for Battell or skirmish. And here the eyes of the Drum must be very vigilant to obserue his Captaine or Commander; that by the least signe, either of his hand, leading-staffe, or whatsoever else he carries, he may either continue his charge, retreat, or else charge home: and

and every *Souldier* ought to bee so well trained and practised, that in the time of *Battell*, he may receive ample instructions from the sound of the *Drumme*.

If the *Captaine* sends out loose *Files* or *Ranks* to skirmish before the front, the *Ensigne* continues standing at the head of the *Pikes*, his *Colours* flying. If the *Captaine* prepare to give fire, either even with the front of *Pikes*, or in the single borne *Battell*: then the *Ensigne* to furl up his *Colours*, and retreat to the *Half-files*.

*The Body drawne into a square, with the Officers in their places.*

*Front.*

		C		
		E		
S				S
	m m m m	D p p p p p p p p	D m m m m	
	m m m m	p p p p p p p p	m m m m	
	m m m m	p p p p p p p p	m m m m	
	m m m m	p p p p p p p p	m m m m	
	m m m m	p p p p p p p p	m m m m	
	m m m m	p p p p p p p p	m m m m	
	m u m m	p p p p p p p p	m m m m	
S	m m m m	D p p p p p p p p	D m m m m	S
		L		

*Rere.*

Thus

Small Companies have beyond the seas but two Sergeants and two Drummes.

The willing mind will find many waies to learne.

Thus many *Officers* may serve for a larger *Company*, if the *Souldiers* be expert and skilfull: and to the contrary, they are all too few, if they be raw and unexperienced. I have seene some *Companies* which have been so absolutely ignorant, that each man would have needed an *Officer* to have kept him orderly in his place. Neverthelesse, I make no doubt, but that by the carefull oversight of the *Lord Lieutenants*, the good assistance of their *Deputies*, and the diligence of the *Captaines*, and their *Officers*, this fault will quickly be amended. And this might easily enough bee done, if that those which are *owners* of *Armes*, would meete one houre or two in a fortnight (at their best leisures) and first practise the *postures* of the *Pike* and *Musket*, not omitting to *exercise* the *Motions* and *Firings*, when they are growne more expert. If any shall object, that however this may bee done in *Townes* and *Cities*, yet it cannot bee in the *Countrie Villages*. I answer, that if they meete not above foure, sixe, or eight in a place, although they have no *Officer* to instruct them, yet by conferring and trying, and often practising, they will beginne to carry their *Armes* with more ease; and to use them with more delight. Neither need they to bee altogether ignorant, seeing there are divers printed *pourtraitures* of the *postures* of each *Armes*: as also *books* whereby they may have very ample instruction. By which having attained some little skill, they will not be contented, untill they have better improved it by the instruction of their



their Officers: after which they will prove better *proficients* in one houre, than as they were before in a yeare.

CHAP. LXXIII.

Of firing by forlorne Files. The  
Manner and Vse.



**B**Efore I enter upon *formes* and *figures* of Battell, bee pleased to observe with mee, that all *firings* are either *direct* or *oblique*: notwithstanding that the *forms* are full enough of *variety*, occasioned (most times) by the *situation* of the place; the *order* of the *enemie*, and the *number* of *men*: with other *Politickall* observations for the gaining of *Wind* and *Sunne*. For the *manner* of *Firings*, they are sometimes *advancing* against an *enemie*, sometimes *receiving* the *Enemies* charge upon a *stand*; or else *retreating*. Otherwhiles, wee give fire in the *Reere*, marching from the *Enemie*: or in *Flanke*, marching by an *Enemie*: and it may so fall out, that the *Enemy* may charge in severall places at once; as in *Front* and *Reere*; or in *Front*, *Reere*, and *Flanke*, of which particulars, I will severally

All firings either to the front reare or flanks whether marching or standing are either direct or oblique.

treat, desiring to give content to all, not making the least question but that benefit may accrue unto some. And therefore hoping that the *courteous* and best *qualified* will accept of my good meaning, and not refuse my cates, although presented unto them in earthen vessells: whereby I shall bee induced with more willingnesse to proceed in my intended discourses, so you bee pleased to favour me with your better *opinions*, neither rashly condemning me of *prodigality*, for enterprising a work of such *consequence* as this; nor too suddenly accusing my *simplicity*, for preferring my *rush-light* before the *Sunne*, when others suffer their *Torches* to burne out in darke *Lanternes*; whom I confesse to be farre more able (were they but halfe so willing) to have imparted of their *talents* to the benefit of their *Countrey*. But seeing that they will not vouchsafe it, and that I, like *bold bayard*, have adventured thus farre, I shall (with your good favour) proceed. And first I will beginne with *Firings in front, advancing, and standing*, and so to the rest. And for the more cleare expression of each *firing*, I will deliver them both in *words* and *figures*. The first whereof shall bee a *firing by forlorne files*, which commonly is used in our exercise two manner of waies: One way is, for the two *uttermost files* of each *flank* of *Muskettiers* to march forth, being led on by the two *junior Serjeants*, so farr as by the superior *Commander* shall be thought fit; who being there to *stand*, the *formost ranks* are to give fire, *wheeling off* both to the *right*, or to the *right and left* (if it be so commanded) and to place them

Firing by for-  
lorne files.

themselves in the *reere* of their own *files*, the rest *firing*, and doing of the like, untill they haue *fired* once or twice over, according to their directions. This done, the next two *outmost files* of each *flank* are to *march* forwards into the *place* assigned, and to do the like: those *files* which formerly *gave fire* in the meane time *trooping* backe, and placing themselves next the *Pikes*, on the *inside* of the *divisions* of *Muskettiers*; the rest of the *Muskettiers* (in like manner) *marching up*, and *firing*; still placing themselves next the *Pikes*, as afore said. When they have *fired* all over, and placed themselves according to these *directions*, they are *reduced*, as at first. A second way of *firing* by *forlorne files* may bee after this manner: The *outermost files* of each *flanke* are led forth by the *Serjeants* (according to their *charge*) untill they have brought them unto a *fit place* for *execution*: and then they *command* their *files* to *ranke inward*, and to *present*, and *fire* all together; as you may plainly perceive by the *figure* following.

Another way  
of firing.  
Note the di-  
stinction.



Note that the outermost file of each flank being marched forth, the next outermost files are to follow in the Reere, untill the two first files have ranked inwards. Then the Leaders of the second files are to march straight after the first file-leaders, untill they have closed to their order.

S m m m m m m m m m m m m m m S  
 m m  
 m m  
 m m  
 m m  
 m m  
 m m  
 m m  
 C  
 E  
 m m

S m m m D p p p p p p p p p p D m m m S  
 . . m m p p p p p p p p p p m m . .  
 . . m m p p p p p p p p p p m m . .  
 . . m m p p p p p p p p p p m m . .  
 . . m m p p p p p p p p p p m m . .  
 . . m m p p p p p p p p p p m m . .  
 . . m m p p p p p p p p p p m m . .  
 . . m m D p p p p p p p p p p D m m . .

L

The files being ranked inwards, the file-leaders become the outermost men of the ranke (when they give fire) and become leaders of their files againe in the wheeling off after they have fired.

The first two files having ranked inward, presented and fired, are to wheele off to the right and left; following their \* leaders in single file, and placing themselves on the inside of their divisions of Muskettiers next the Pikes; the next outmost files which followed the first in the reere; in the meane time ranking inward, firing, and wheeling off, as before, and placing themselves next the Pikes. And so forwards for all the rest of the files: still marching up, and doing the like, so long as the Captaine or Commander shall see fitting. These kinds of firings

*rings* (and all such like) are either for the *beginning* of *skirmishes*, before the *Bodies* come within shot one of another, or to provoke the *Enemy* to *bastile*, to draw them into some *ambushment*, & other such *Politick* ends: the *number* of men which *march* forth upon such *designes*, nor the *manner*, are not alwaies certain, but consist sometimes of more, sometimes of fewer, according to the *number*, *time*, and *place*.

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## CHAP. LXXIV.

*Of Firings by two Ranks, ten Paces advanced before the Front: Next, even with the Front: And lastly, even with the Halfe-files.*



Advancing of two ranks to fire, ten paces before the *Front*, is most commonly used, when one or both *Battells* march against each other; the *Muskettiers* being led forth by two ranks together ten or twenty paces, before the front of the body; that so they may come neere enough to doe certaine execution. A *Serjeant* from each flank leading up the two foremost ranks, (according as they shall have order) the first rank of each flanke is to present and give fire, wheeling either all off to the right, or to the right and left, as you may perceive by the following Figure.

*Front.*

S	m	m	m	m				m	m	m	m	S						
u												u						
u												u						
u												u						
						C												
S	u	m	m	m	m	D	p	p	p	p	p	D	m	m	m	m	u	S
		m	m	m	m		p	p	p	p	p		m	m	m	m		
		m	m	m	m		p	p	p	p	p		m	m	m	m		
		m	m	m	m		p	p	p	p	p		m	m	m	m		
		m	m	m	m		p	p	p	p	p		m	m	m	m		
		.	.	.	.		p	p	p	p	p		.	.	.	.		
		.	.	.	.	D	p	p	p	p	p	D	.	.	.	.		

*Reere.*

The



The first *rank* having *presented*, *fired*, and *wheeled off* (as aforesaid) are to *march* close downe in *single file*, within *three foot* of their owne *flankes*, untill they come to the *Reere* of their owne *Divisions*; where every man is to place himselfe in the *reere* of his owne *file*. The second *ranke* being at the *distance* of *three foot* behinde the *first ranke*, when they first tooke their *ground*: they likewise are to rest their *Muskets*, mounting their *muzzles* cleere of their *leaders*, and so to *stand* with their *matches* cockt, and *pannes* guarded, that so they may *levell* and *fire* as soone as their *leaders* are cleere of them, and *wheele off*, in like manner *placing* themselves as they were before. The next two *rankes* are to *beginne* to *advance forwards*, when they see the *last* of the two former *rankes*, *presented ready to fire*. And they also having *fired*, *wheele off* as the others did before them. And so, *successively* the rest of the *rankes* *advancing*, *firing* and *wheeling off* againe, *placing themselves* according to former *directions*. This way they may give *fire*, once or of *finer* over, as the *enemy* doth *advance*, or the *Commander* shall see fitting. All this while that the *Muskettiers* *advance* so farre before the *front* (if the *body* be upon *march*) the *Pikes* may be *shouldered*: but when the *bodies* come within *ten score*, or lesse, then it is fit that the *Muskettiers* give *fire* even with the *front* of the *Pikes*, and that the *Pike-men* *advance* their *Pikes*, and *close forwards* to their *distance* of *three foot*, that so they may bee *even in ranke* with their *Muskettiers*, as you may perceive by the following *Figure*.

The manner described how this firing ough to be performed.

No Commander so precisely bound to any forme, but that he may, as occasion serveth, alter his Figure at his pleasure.

Front

## Front.

C

S m m m m D p p p p p p p p p p D m m m m S  
 w m m m m p p p p p p p p p p m m m m w  
 w m m m m p p p p p p p p p p m m m m w  
 w m m m m p p p p p p p p p p m m m m w  
 w m m m m p p p p p p p p p p m m m m w  
 m m m m p p p p p p p p p p m m m m  
 m m m m p p p p p p p p p p m m m m  
 S . . . D p p p p p p p p p p D . . . S

L

## Reere.

Now the *Pikes* being advanced, and the *rankes* closed forwards to their due distance of order, the *Muskettiers* are to present, even with the front, every *ranke* successively moving forwards, untill they come to bee even in *ranke* with the first *ranke* of *Pikes*, there to give fire, and to *wheele off* to the right and left, *trooping*, *file-wise*, downe close to their owne divisions: and taking their places in the *reere*, as in the former figures. The first *ranke* of *Muskettiers* having fired, and wheeled away, the next *ranks* are to move forwards at three \**motions*, into their places, and there to give fire after the same manner; *wheeling* away againe, and placing themselves according to former *directions*, every *ranke* still making good their *Leaders ground*. In

\* The three  
**M**otions are,  
 Blow your coale,  
 Open your Pan.  
 Present brest  
 high.  
 You are to  
 blow your coale  
 stepping for-  
 wards with  
 your left foot.  
 Open your Pan, stepping forwards with your right foot. Present, stepping forwards with your left foot. These *Motions* are to be performed hand and foot together, by every one that advanceth ground, to give fire, without expecting any directions in time of skirmish.

this

this sort the *battell* may be continued, untill they have fired once, twice, or oftner over; and that the *Bodies* be come so close together, that the pikes begin to *port*, and so at length come to *push of Pike*. Which done, the *Musquetiers* are to give *Fire*, either *retreating*, or else not to *advance* further, then *the halfe files of Pikes*. For in that place (the *bodies* being come so neere together) they will doe as much *execution*, as if they were *even* with the *front*. The manner of the *Standing*, you may perceive by the following Figure.

The Pikes  
comming to  
the Port, and  
charge: the  
Musketiars  
either firing  
without advan-  
cing into their  
leaders greūd,  
or even with  
the halc filez.

*Front.*

C

S m m m m  
w m m m m  
w m m m m  
w m m m m D  
w m m m m L  
m m m m  
m m m m  
S . . .

D p p p p p p p p p p D  
p p p p p p p p  
p p p p p p p p  
p p p p p p p p  
p p p p p p p p  
p p p p p p p p  
p p p p p p p p  
p p p p p p p p D  
L  
*Reere.*

m m m m S  
m m m m w  
m m m m w  
m m m m w  
m m m m w  
m m m m w  
m m m m  
m m m m  
. . . S

The *Pikes* being now *charged*, and ready to come to the *Push*, the *Musquetiers* are to advance no further than the *Halfe Files* of *Pikes*: that (for they may doe Execution with their



shot, and bee out of danger of the Pikes. This having attained, they are there to *present*, and give *fire*; every rancke still *moving forwards*, and maintaining his leaders *ground*. After they have performed their *firing*, they are to wheele off by *division*, as in the former Figures: still placing themselves in the *reere* of their owne *files*, alwayes taking their directions from the *Drum*, either for *charging on*, or *retreating*, &c.

The Reduce-  
ment.

The *battell* or charge being ended, the *reducement* is easie. The *leader* of each *file*, being in his place at the *head* of his *file*, command the *Musquetiers* to *march up*, even with the *front*, of *pikes*, and then they will be as at first.

\* Note the se-  
verall observa-  
tions.

Observe withall that when the *firing* is to bee performed, even with the *front*, then the *Musquetiers* are still to make good their leaders *ground*: they want to be in the place of most security (which is the *Reere*) as you may perceive by the *pricks*, which I have designed, for noting out the *empty roomes* of such, who have *closed forwards* to make good the *ground* in the *Front*: the others that last *fired*, are wheeled off, and *whooping down* into their places. When the *firing* is even with the *halfe-files*, they are to do the like, unlesse the *Drumme* beat a *retreat*; for then the *Musquetiers* neither *advance*, nor *retreat*: but every rancke giving *fire* on the same *ground*, they *stand*: and then wheel off againe, that their fellows may doe as much. \* Neverthelesse when the *forlorne files* *march forth*, or that two ranckes *march forth*, ten *paces* (or more) before the *front*: then they are to give *Fire*, as upon a *retreat*: unlesse the

\* Note concern-  
ing forlorne  
files, and two  
rancks before  
the *Front*.

enemy

enemy give ground or flye. I will now shew some other wayes of *firing in front* (before I shew the *firings in the reere*) The first whereof, shall be the *horn Battell*: as in the Chapter following.



CHAP. LXXV.

Of the *Horne-Battell*; how to make it: and to reduce by firing.



The *Horne-Battell* may bee for the same occasion and use, as the *firing*, by two rancks ten paces advancing before the front; and is by some held more serviceable, because that the *Musquetiers* doe their execution more roundly, without any intermission of time: and keepe themselves without stragling from their *bodies*. Besides, the *wings* of *Musquetiers*, being so advanced, are more apt for *over-fronting*, and more easily to be wheeled, whereby to charge the enemy in *flanke*, each of these *wings* or *divisions* are to be led up by a *Sergeant* (or some other superiour *Officer*) unto the place appointed by the *Chiefe*. But because that it may be performed in time of exercise, by the intelligible *Souldier*, observe the *Command* which produceth this following Figure.

*Pikes Stand; Musquetiers, march; untill the  
Bringers up, ranke with the front  
of Pikes.*

*The Horne-battell.*

[illegible]

\* The firing de-  
scribed,

\* The figure being perfect, the first ranke of Musketiers, present and give Fire, wheeling off, either all to the right, or to the right and left (according as they shall have direction) and placing themselves orderly, in the Reere of their owne files. The next rank



ranke (after the same manner) firing and wheeling off, and placing themselves behind those, which were their leaders. Thus is every rank, successively, to doe the like : untill they have all given fire. \* If the Commander would still preserve, and continue the same figure ; then let the Musquetiers still move forwards, into the ground (or place) of them that fired before them : and the forme will bee the same. But if by the Chiefetain it be found necessary, that after once or twice firing over, the shot should flank their pikes, then the Musquetiers must not advance into their leaders ground ; but to the contrary, every ranke is to present and Fire on the same ground, they stand, and that so soone as they are cleere of their leaders. Or if need be, the Pikes may advance and march up, to make their front intire : which being done, the file leaders of Musquetiers being in front, they are reduced.

\*Note.

The Reduction.



## CHAP. LXXVI.

*Of the Demie-hearse Battell : The use of the Figure, how to make it, and to reduce it by firing.*



The danger of the Demie Hearse, is feare of being over-fronted.

He next firing in *Front* which I present unto you, is the *Demie-hearse* : which is a figure, firme, solid, and stable, yea and doth as much *execution* as any of the former, and that with halfe the danger. For the *Pikes* in the former figure, they either *ranke* even with the front of *Musquets*, or else the *division* of *Musquetiers* being open, they become liable to the danger of the enemies shot : themselves not being able to doe any thing, either *offensive* or *defensive*. But, to the contrary, in this figure, they are secretly covered by their owne *Musquetiers* : untill they approach neerer to the enemy. Whereby they may be able to doe some service; either by sending their *showres* of *arrowes* amongst them, thereby breaking their order and array, or else by *closing neerer*, come to the *shocke*, and so try the fortune of the day. But not to hold you longer in *circumstance*, take the words of *command* : which produce the *Figure*, as followeth.

*Pikes,*

*Pikes stand, Musquetiers advance before your  
Front of Pikes, and close your  
Divisions.*

*The Demie-hearse.*

*Front.*

S w m m m m C m m m m w S  
 w m m m m m m m m m w  
 w m m m m m m m m m w  
 w m m m m m m m m m w  
 m m m m m m m m m m  
 S m m m m D p p p p p p p p D m m m m S  
 m m m m p p p p p p p p m m m m  
 p p p p p p p p  
 p p p p p p p p  
 p p p p E p p p p  
 p p p p p p p p  
 p p p p p p p p  
 D p p p p p p p p D  
 L

The strings on this figure, may be divers; yet I shall content my selfe onely to shew two of them.

\* The first is, that the Musquetiers may at the discretion of the Commander, give fire in front: and so wheele off by division (or all to the right, as shall best please him that commands in Chiefe) placing themselves in the Reere of their owne divisions and files of shot, which is just before the front of Pikes.

\* The firing on this figure.



The next ranks, then moving forwards into their leaders ground, are to present, fire, wheele off, and place themselves after the same manner: the rest of the Musquetiers, doing the like, untill they have all given fire: which firing, doth nothing alter the forme or figure of battell. Having fired once or twice over this way, \* the second firing shall serve for reduction: which is indeed the firing intended to be exprest by this figure. And that I may by words the more clearly explaine the worke, take these directions following.

\* The second firing on this figure serveth for the Reduction.

\* Note this direction.

\* The first ranke having given fire, are to wheele equally off by division: each part falling file-wise downe, close by their flanks of Musquetiers: untill the leaders of the ranks of Muskets come down as low as the first ranke of Pikes; which being performed, they are to face outwards, and to move so far forth in a strait line, untill they have ranked even with the first ranke of Pikes. But herewithall are they to observe, that they must leave an intervall betweene the innermost-musket of each flanke; and the outermost-file-leader of the Pikes. So soon as the first ranke hath given fire and wheeled away, the second ranke is to give fire, wheeling off, as before, and passing downe betweene the Intervals on the flanks: placing themselves after their leaders. The same is every ranke successively to doe, untill all the Musquetiers are dranne from before the front, and placed on the flanks of their Pikes. \* But when there are not above two ranks of Musquetiers to give fire, then the pikes may port; and when the Musquetiers have fired, and are wheeled away, they may charge. And lastly,

\* The Pikes port & charge.

lastly, the Pikes being *re-advanced*, the *body stands reduced*, as at first.



CHAP. LX VII.

*Of giving Fire, advancing, by way of Introduction, with the beneficiall use of the Bow and Pike.*

**I** Shall next offer to your perusall, a figure of *Introduction*: which is a *passing through or betweene*: Being a *firing* by way of *advancing* against the enemy, and of *gaining ground*. I will not dispute how usefull it is; but sure I am, it is overballanced with danger. As for such whom I have seene to *practise* it, they have rather used it for *variety*, in a well experienced Company, then for any known *excellency* it hath in it selfe. But if these *lines* happen to be over-lookt by any, that preserves a better opinion of this *firing* by *introduction*, then I doe: I shall be willing to leave them to their owne liking, while I in the meane time proceed to shew the manner of the *execution*, which is usually one of these two wayes. \* The first, when the *Motion is begun by the second ranke from the front*. The other, when it is begun by the *Bringers up*. Nevertheless you must note, that your *files* of Musquetiers must be *opened* to their *open order*; before the *firing* begin: that so, the Musquetiers may passe betweene the *Intervals* of each *file*, to give fire in the front.

\* firing by introduction, ordinarily performed these two manner of wayes.

*front. And therefore take the words of Command and Direction; which will produce this Figure following.*

*Musquetiers, make ready to give fire by introduction.*

*Files of Musquetiers, open by Division to your open order.*

S	m	m	m	m					m	m	m	m	S
m	m	m	m	m	m		C		m	m	m	m	m
m	m	m	m	m	m	D	pppp	pppp	D	m	m	m	m
m	m	m	m	m	m		pppp	pppp		m	m	m	m
S	m	m	m	m			pppp	pppp		m	m	m	S
							pppp	pppp					
							pppp	pppp					
							pppp	pppp					
							pppp	pppp					
						D	pppp	pppp	D				
							L						

\* This direction for firing by introduction.

\* If there be no direction given, they are to pass through to the right.

\* This firing by introduction may be thus performed. The Pikes being flankt with their Musquetiers, the first ranke of each flanke, *present and give fire: having fired, they stand and make ready againe in the same place.* \* The second ranke passing forwards before the first, doe there fire and stand: the third ranke then passing forwards after the second, and



and standing even in ranke with them that first fired; that so soone as the second ranke hath fired, they may quickly step before them, and fire in like manner. \*In this firing, still the ranke which is next to fire, stands even in ranke with them which last fired; untill those which stand presented, have likewise given fire: after which they then passe before them; the Ranke which was their next followers, passing forwards and ranking with those which last fired: every man following his Leader successively, untill the *Bringers up* give fire, & stand, and then the Figure will become a *Horne battell*, All the while that this Firing by *Introduction*, is continued, the Pikes may be shouldered (if there be no feare of horse) or otherwise at discretion. If you continue this Firing twice over; the Muskettiers will have their *right places*: which being done, march up your Pikes, to ranke even with your Muskettiers in front, and they are reduced.\*For the other way of Firing by *Introduction*, the first ranke (or *file-Leaders*) are to give fire as before, and to stand, the last ranke (or *bringers up*) in the interim of their Firing; marching up, and ranking even with the second ranke: the rest following their Bringers up, as they do when Bringers up double their front. The first ranke having Fired, the *bringers up* step immediately before them; present, and give fire; the rest stil, successively, doing the like, untill every rank have given fire once over. Observe withal that the *file-Leaders* are to give fire twice over: being the first & the last: & then to stand, the Pikes marching

\* Note.

\* A second way of firing by introduction.

up

The reduce-  
ment.

The use of the  
bow and Pike.

up, even with their front of Musquetiers. And thus they are reduced as at first. \* The Pikemen, all the time of this *firing*, doe no service: Notwithstanding, if one *halfe* of them had *bowes* fastened unto their Pikes (being able and well practised men) they might, whilest the Muskettiers are in *firing*, be dealing of their doles about: and although their *arrowes* did not happen to wound mortally, yet the whisteling noyse, the terrour of the fight, and the severall hurts (which could not chuse but bee many) would be a great abatement to the stoutest courages. And great pittie it is to see the lusty *Pikeman* poorely to droppe downe by the *Musket-shot*, himselfe not being able to hurt his enemy at that distance, nor defend himselfe.



## CHAP. LXXVIII.

*The way to make the Diamond Battell: severall wayes to fire upon it . with diverse other figures and firings, which are thereby produced.*



The *Diamond Battell* is also a firing in front; though more for shew, then *moderne service*; yet because that some hold it in venerable respect, I thought fit to place it amongst the rest; leaving every man to his liking, either to use it

i, or refuse it. It may be that some will looke, that I should make the *Sheere Battell*, the *Wedge*, the *Saw*, and many such like: which might bee made either *hollow* or *solid*. But I shall intreat such to spare me, for I would not willingly spend time to so small purpose; chusing rather to insist on *Figures*; more profitable for them, and commendable for mee. Yet if any man have a mind to practice any of them, by observation of this *Diamond Battell*, he may easily make them. But not to hold you longer with circumstance, the words of Command, and direction, which are for the making of this *Diamond Battell*, are as follow.

*First cause your Musquetiers of the right flanke, to open to the right, to a sufficient distance, for receiving the Musquets of the left flanke.*

Or you may draw all your Musketiers into the Front of Pikes: which is the better way.

*Then command the Musquetiers of the left flanke to passe through into the space of ground on the right.*

This



This being done, for to make the Figure.

Command.

*Files of Musquetiers, ranke 1.3.5. 7. &c. by increase  
to the left.*

*Files of Pikes, rancke by decrease after your  
Musquetiers.*

C  
m  
S m m m S  
m m m m m  
m m m m m m m  
m m m m m<sup>D</sup> m m m m  
m m m m m m m m m m  
m m m m m m m m m m m  
m m m m m m m m m m m m  
S E S  
P P P<sup>D</sup> P P P P P P P<sup>D</sup> P P P  
P P P P P P P P P P P P  
P P P P P P P P P P P  
P P P P P<sup>D</sup> P P P  
P P P P P P  
P P P P  
P P P  
L

The

\* The Musquetiers may fire on this figure, divers waies: though I onely intend to speake unto two of them. The first is the most usuall way: and that is, the *giving fire in ranke*, the first man (or poyn of the *Diamond*) first giving *Fire*: then wheeling off to the right, and placing himselfe just behinde the *single Pikeman* in the *reere*. Then the next ranke being three men, *give Fire*, wheeling off by *division*: and placing themselves in Ranke, behind the *single Musquetier*, as they were before the firing began. This done, the ranke of five *Musquetiers*, gives fire; wheeling off, in like manner, by *division*: ever observing, that where the *number* is *odde* and they *commanded* to *wheele off* by *division*, there the greatest *number* alwayes goeth to the right. And so in like manner, the Ranks *give Fire* successively; and place themselves after their *leaders*, as before. When all the *Musquetiers* have given *Fire*, and are wheeled off, then *charge Pikes*, which will be *fifteene* in the first Ranke, the rest *decreasing*, Having advanced your Pikes, you figure will stand like two *wedges*, with their poyns joyned, as you may perceive by this Figure next following.

From

Front.

C

S p p p p p p p p p p p p p p p p S  
 . p p p p p p p p p p p p p .  
 . p p p p p p p p p p p .  
 . D p p p p p p p p p p D .  
 . p p p p p p p .  
 . p p p p p .  
 . p p p .  
 . p .  
 . m .  
 . m m m .  
 . m m m m m .  
 . m m m m m m m .  
 . m m m m m m m m m m .  
 . m m m m m m m m m m m m .  
 S m m m m m m m m m m m m m m m S  
 L

Reere.

\* observe this  
 way of reduce-  
 ment, by inter-  
 changing of  
 ground.

\* If you would reduce your men from this *Figure*, without *firing*, (your men being sufficiently expert) let the *Musquetiers* stand, and *Pikes* face to the *reere*, and so the *wedges* will stand faced in *opposition*: next, command them to *interchange ground*: the *Musquetiers* advancing forwards, into the *ground* of the *Pikes*, and the *Pikes*, moving into the *ground* of the *Musquetiers*; and then by facing the *Pikes* to the former *front*, the *body* will stand in forme of a *Diamond* againe.

If you would reduce this figure againe into the forme



forme of the Diamond, by firing your *Musquetiers* being now all in the *reere*) the *body* must *face about*: and so the *firing* will be contrary to the former. But if you *wheele them about*, they may give fire the same way. Howsoever after they have given fire, they are to *wheele off by division*, and to place themselves in the *reere* of the *Pikes*, even in *ranke* again, as they were when at first they gave fire. Thus having all fired over, and *wheeled away*, the *Pikes* may charge: and being againe *advanced*, the *body* will stand in forme of a *Diamond*: and this I pray you to conceive, for I intend not to remark the Figure.

\* The second way of firing on the *Diamond figure*, is by way of *Countermarch*: and is an *oblique firing*. For whereas in the other firing by *ranckes* (in the *Diamond Battell*) each *rancke* fired by increase of two (beginning with one, and ending with fiftene in a *rancke*) this firing, contrariwise, begins with 15. and ends with 1. still decreasing 2. \* For this firing, your files must be at open order, because the *Musquetiers* must *countermarch* downe betweene the *Intervals* of their owne files to the *right*: every *Musquetier* that findes himselfe without a *leader*, being to present and give fire: and then to *countermarch* to the *right*, and to place himselfe in the *Reere* of his own file, behind the *Pikes*. When the first 15. have fired, then the next 13. present fire, and *countermarch*, still placing themselves in the *reere* of their owne files. Next there fireth 11. then 9, &c. for still there fires so many, as are cleere from any *leaders*. And in this manner of firing, they that fire together, stand neither in *rancke* nor file but *obliquely*. When all the

\* An oblique firing from the Diamond, the *Musquetier*, *countermarching* and making deepe wedge.

\* The direction for this firing.

Musquetiers have *fired*, and are *countermarch* into the reere of their owne files, let the pikes charge: and then the forme of your Battell, will be like a deepe wedge: as you may perceive by the following figure, where now your ranks are become two and two of a number.

*Front.*

C

S p p p p p p p p p p p p p p p p S  
 D m p p p p p p p p p p p p p m D  
 m p p p p p p p p p p p m  
 m m p p p p p p p p p m m  
 m m p p p p p p p m m  
 m m m p p p p p m m m  
 m m m p p p m m m  
 m m m m p m m m m  
 D m m m m m m m D  
 m m m m m m m  
 m m m m m  
 S m m m S  
 m m m  
 m  
 m  
 L

*Reere.*

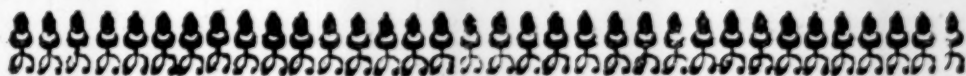
\* Curiosity  
 sometimes not  
 to be neglected  
 because some  
 men being  
 therewith de-  
 lighted, may  
 thereby bee  
 therein, may

\* Your men standing in form afore-shewed, if you please yet to be more curious, face them all to the Reere, and command your Musquetiers to march 10 or twelve paces. Your pikes to stand, and your Musketiers will present you with an *hollow wedge*, and thereby be gained to affect the practice of Armes, and after some continuance therein, may happily prove, solid, and good Souldiers,

your

your *pikes* with a *solid wedge*. \*Lastly, to reduce all these severall formes into the *first proper square battell*: first, let the *solid wedge*, *close forward*, into the hollow of the other: then, let the *Muskettiers* make *ready, present*, and fire, as before. That is to say, every *Muskettier* that finds himselfe without a leader, is to give fire, and to *countermarch* to the reere of his owne file, the rest doing the like, successively. When they have all fired, and are *countermarch cleere*, let the *pikes charge*: and then your body will have the *form of a Diamond* againe. Next, face them all to the *Reere*; and *command, ranks, file 8. to the right*. Which being done, passe through the *Muskettiers* which belong to the left-flanke, into their places; and close the *Muskettiers* of the right-flanke to their due distance: and they will stand, all properly *reduced*, into the *Square* as at first.

\*.The Reduce-  
ment,



CHAP. LXXIX.

Of the *Convex Halfe Moone*; The use of the Figure:  
and of severall wayes of firing upon it.



He *Convex halfe-moone*, or semi-circular Battell, is a forme both good and usefull; which the time, the number, and place (with other circumstance) may make either beneficiall or prejudiciall: wise Captains and Commanders



\* The usefulness of this Figure.

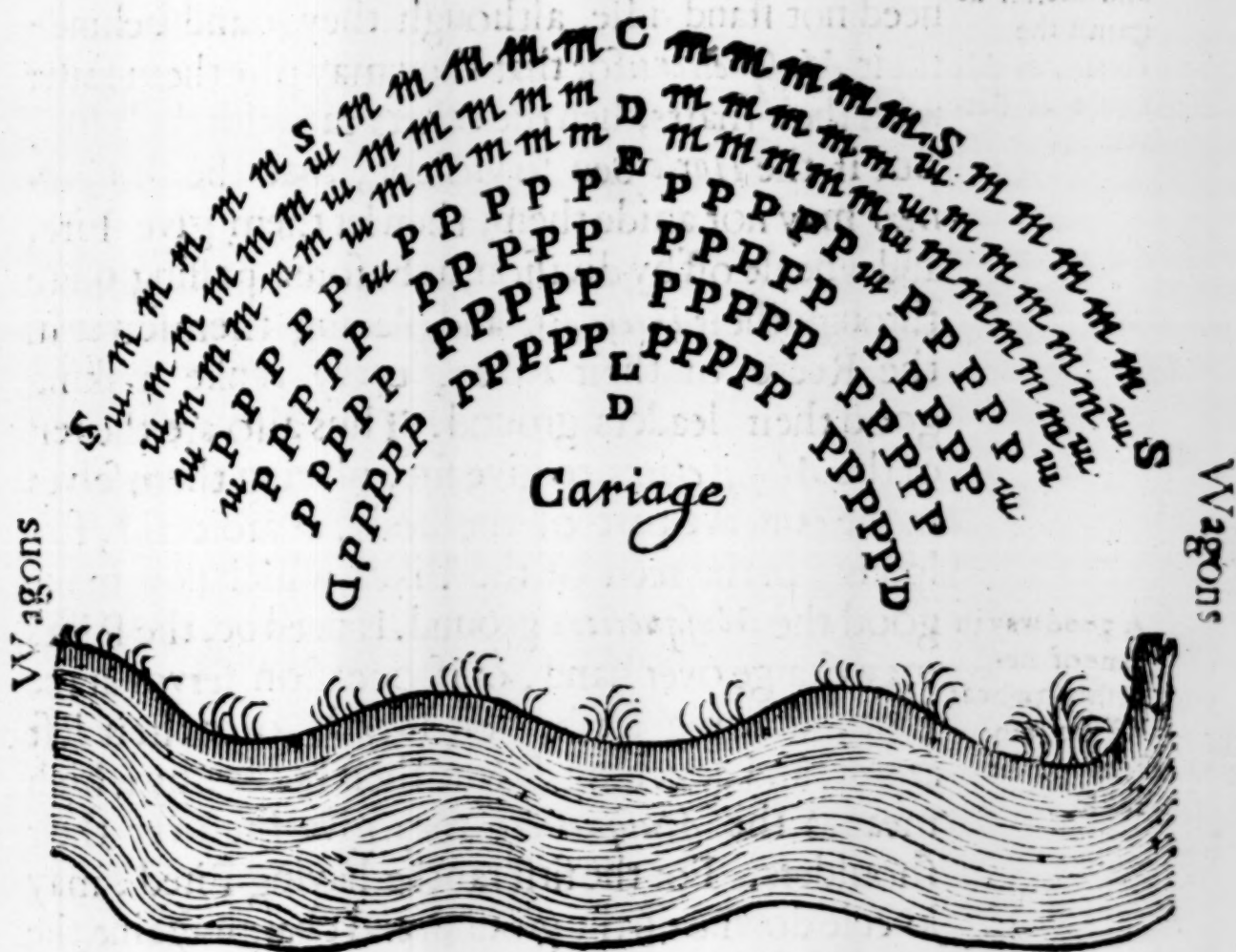
ever foreseeing with providence, what formes or figures may be most *profitable* and available, for the present service.\* This Convex figure may be usefull, either at the *landing* of *Souldiers* in an enemies *Coun-try*, or for necessity (the enemy being more able in *horse*) making use either of *hedge, ditch, wood, creeke* or *River*; to secure the *Reer*. For the figure it selfe, it may be made many wayes; either with the *Muskettiers* outermost, or innermost, or lined, &c. at the discretion of the *Commander*. It may also be made in a *Regimentall* way, or after the way of a small and private *Company*: But because I have onely in this my small *Treatise*, taken upon me to shew the *postures, motions, and figures*, which are most usually done in a small *Company* (although many of them, yea the more part, may be very fit for larger *Bodies*) I shall content my selfe, to saile in so small a *bottom*, not desiring to put on more saile then will suffice, for the *bearing* of so small a *burthen*. Wherefore my request shall be, that every *courteous*, and *Skilfull Pilot*, that shall *come aboard* this small *Barke*; will be pleased neither to *launch* it into the *maine*, lest it be *swallowed* in the *Surges*; nor to *expose* it to the danger of *shelues, rocks, and sands*; lest it suffer *shipwracke* for want of good *guidance*, but so to *steere* it, that it may safely arrive at its desired *Harbour*: wherein they will both honour themselves, in expressing their vertues, and grattifie me, by applying each motion, figure, and forme, to his right use, and true intention.\* I will now shew, how the figure is to be made, which is as followeth. If your *Battell* be in forme of an *Horse*, then wheele them to the

\* The direction to make this Figure.

the right or left about ; untill they have attained this *Figure*. But if in a square, then observe these following words, which will produce the *Figure*.

*Wheele your Flank into the Front: then face the Body to one of the Flanks: and wheele your Battell into a Convex halfe Moone.*

*The Convex halfe Moone.*



\* Having brought your *Souldiers* into this *Convex forme*, you may face them all *inward*, for *speech*; or *outward* for *Fight*. Then let the *Officers* make *Intervals* for the *Musquetiers*; and let the *outermost Arc*.

\* The severall wayes to fight upon this convex figure.



The Bow and Pike very good and usefull against the Horse, in this figure of Battell.

A good way in time of necessity, to beat off the insolence of the horse.

or first ranke of each division, present and give fire, those of the right flanke wheeling off to the right, the left flanke to the left; placing themselves in the Reere of their owne divisions of *Musquetiers*, still making good their leaders ground. The rest of the ranks are to doe the same: untill they have all given fire. \* Nevertheless, if your enemy be too potent for you, by reason of his *Horse*, your *Bow Pikemen* need not stand idle, although they stand behinde their *Musquetiers*: for that they may plie them faster with their shafts, then the others can with their shot, But if the *Horse* bee so violent, that the *Musquetiers* may not abide them, then let them give Fire, and wheele off by division, as before: passing quite through their *Intervals*, and placing themselves in the Reere of their *Pikes*, every ranke making good their leaders ground. Thus also are the rest of the *Musquetiers* to give fire, placing themselves in the concave part of the body, as aforesaid, following in the reere of the *Pikes*, which now make good the *Musquetiers* ground. If need be, the *Pikes* may charge over hand, or if occasion serves at the foot, drawing forth their swords over their left armes, and couching downe their heads: by which meanes the *Musquetiers* may give fire over their shoulders. For the first ranke having Fired, may kneele downe on the ground, and charge againe, the second ranke may give Fire, and kneele in like manner, making ready againe. And so for the rest, all giving Fire, and kneeling on the ground, that so the next rank behind may give fire over them. Thus continuing the Firing, untill all the *Musquetiers* have given



given Fire, once over. Nevertheless if the enemy shall still continue his charge, and presse upon you, the first ranke may rise with the rest, and give Fire over againe, as before. And so the battell may be continued; the Pikes still keeping off the horse.

\* For the reducement of this figure, and to bring every man to his place, let your *Musquetiers* (either firing, or *passing through*) be brought into the places they were in, before they first gave fire. Then face the whole Body to one of the flanks, and march them untill they have evened their rancks, and straitned their files. This done, then if all your Pikes be on the right flanke, wheele your right flanke into the midst, if on the left flanke, wheele front, and reere into the left flanke. This being done, let the *Commander* passe to his proper file-leaders, and face the whole Body to him, and they are reduced as at first.



CHAP. LXXX.

*Of Extraduction: the severall uses, firings,  
and reducements.*



He next *Firing* which I shall take upon me to demonstrate, shall bee by way of *Extraduction*: which is also a firing in front.\* It may be to singular good use, in a *straight* or *pas-*

The use of this firing by Extraduction.

sage where your *wings* and *Reere* may bee secured: your enemy being supposed too powerfull for you, either in *Horse* or *Foot*, or both. Having gotten into some *strait*, there fill the *mouth*, of the *passage* with your *Pikes*: and if the length of your *Company* be not sufficient to do it, then double your *rankes* (as in this following figure) and let your *pikes* either *order*, *advance*, *port*, or *charge*: according to the occasion; your *Musquetiers* being in the *Reere*, may \**march up* into the *front*, and *Fire*. But before I shew the *Firing*, observe these following *directions*, which produce the *Figure*.

\*The Musquetiers scue up file-wise, to the front, & there give fire in ranke, cross the front of the Pikemen.

*Pikes stand, Musquetiers face to the reere, and march untill you are cleere of your body of Pikes.*

*Then face inward, and close your division: that being done, face to your Leader, and double your Ranks.*

This being performed, the *Pikes* are all in *front*, the *Musquetiers* in *Reere*.

A firing by Extraduction.

Front.

S m m m m m m m m m m m m m m m m S  
P P P P P P P P P P P P P P P P m  
P P P P P P P P P P P P P P P P m  
P P P P P P P P P P P P P P P P m  
D P P P P P P P P P P P P P P P m  
. . . . . B B B B B B B B B B B  
m m m m m m m m m m m m m m m m  
S m m m m m m m m m m m m m m m m S  
L

Reere

Ha-

\* Having ordered your *battell* in this manner, let the first *ranke* of *Mulquetiers* (which are those that follow next after the pikes) *face* to the *right*, and march forth (file-wise) up close by the right *flank* of Pikes, untill he that is the *leader* of them, be come into the front of Pikes, then he is to *leade* them quite cross the front of Pikes, untill he have attained the further part of the *front* to the *left*, which being done, they are all to *stand*, *present*, and give fire. You must note withall, in this Firing, that he which was the *right hand man* of the *Ranke*, and was the *Leader* of the *motion*, now becomes the *left hand man*, when he gives fire; and that having fired, they are to wheel off to the left, close to the left flanke of Pikes, and so to fall in the reere of the Muskettiers. In the *interim*, whilest that the ranke which first fired, is wheeling away, the second rank is *marching* into their *places* to give fire. And in this manner they may maintaine their *Battaile*, so long as they please: the Pikes either *porting* or *charging* all the whiles. The Muskettiers in the time of their *crossing the front*, are to *couch*, or *stoope* vnder their Pikes; that so they may be no impediment to the Pikes in their *charge*. There is another way of *firing* by *Extraduction*, which is, that the right hand leader of *Muskettiers*, *placeth* himselfe before the right file-leader of *Pikes*: the rest all falling beyond him: neverthelesse because I conceive it not to be so good a way as that already shewne, \* I will not trouble you with it: but come immediately to the *reducement* of this, which is as followeth. Command your Pikes to stand, and your Muskets to

\* The direction for this firing.

\* Another way of placing the *Mulquetiers* on this firing.

\* The reducement.

double



*double their front by division: but if you want roome to doe it, then first double your files to the contrary hand of that, which you doubled your ranks; and so having doubled by division, as aforesaid, they will be reduced, as at first.*



# CHAP. LXXXI.

*Of the Broad-fronted Battell, with the wayes of firing upon it.*



He broadfronted battell, must needs be of speciall use; for many occasions, either offensive or defensive. Which because it is so apparant to all, I shall not need to stand to reason with any; rather desiring to shew the manner of making and reducing it: which is as followeth.

\* Direction to make the Broad-fronted Battell.

\* This is intended but for a single Company; for if there be more Companies, then the way first shewne, is far the better.

\* Cause your Pikes to stand, and your Musquetiers to march; untill the reere ranke of Musquetiers be advanced a little before the first ranke of Pikes; then let the Musquetiers face inward, (or in opposition) and close their divisions; and then face to their leader. And if you would bring more hands to fight, double ranks to any hand, and the body (for forme and number) will stand like the figure here next following. \* But the speediest way, (and I thinke the best, I am sure with expert Souldiers,) is to wheele both flanks into the front, which is the way intended by this Figure. For the manner of the

the firing it selfe, you may partly perceive that there are intervals made for each division, to wheele off to the right, that so they may either fall in the reere of the Musquetiers, and there continue the firing; or else fall in the reere of the Pikes, and be thereby secured from the horse. It may be done, one or both wayes: according to the occasion or discretion of the Commander. Neverthelesse, before I shew the firing, observe these words of Command, which produce the Figure.

*Wheele your flankes into the front  
Face to your leader.*

*The broad-fronted Battell.*

*Front.*

S	m m m m	S	m m m m	m m m m	S	m m m m	S
m m m m		m m m m		m m m m		m m m m	
m m m m	W	m m m m	W	m m m m	W	m m m m	W
D	W	D	E	W	C	D	W
P P P P		P P P P		P P P P		P P P P	
P P P P	W	P P P P	W	P P P P	W	P P P P	W
P P P P	W	P P P P	W	P P P P	W	P P P P	W
P P P P		P P P P		P P P P		P P P P	

L

\* The first ranke having presented, and give fire, let them wheele off to the right: all passing downe the Intervals to the right, and placing themselves in the reere of their owne divisions of Musquetiers. The Musquetiers making good their leaders ground; and the next rankes firing, wheele off, and placing them-

\* The direction for the firing.

\* A second way  
of placing the  
Musquetiers  
upon this fir-  
ing.

themselves as before. Having fired once or twice over this way, \* a second way may bee to place themselves in the Reere of their Pikes, either standing or advancing: the Pikemen in the meane time clouding the cleere skie, with their *airy Armoury*. The *Musquetiers* having all given Fire, and placed themselves in the Reere: it need bee, the Pikes may close their divisions, and charge over hand: and if the enemy shall still presse forwards, the Pikes may charge at the foot: the *Musquetiers* giving fire over them.

\* The Reducement.  
N. L. L.

\* For reducement, there are diverse wayes by *firing*, but because I would make every thing so plaine, and easie, that those that read for instruction, may receive benefit, it hath caused me to reduce each figure by it selfe, and not to multiply one upon another, whereby to make them too ambiguous. And therefore, if you make this Figure by wheeling your flanks into the front, and then fire, as aforesaid, the reducement may bee, either \* to fire them over againe, and so to fall into their former places: and then to wheele your flanks into the Front againe, and lastly, face about to the right, and they will be as before. Or else if you would reduce them without giving fire over againe, then command your *Musquetiers* to double your Front by division: that done, wheele both flanks into the Reere, then face to your leader, and command your *Musquetiers* to double your front by division againe: and they are as at first. If I should proceed to shew the many and sundry wayes of Firings, which may be done in Front, my Booke had need to have as many leaves

\* Note that  
the second fir-  
ing will cause  
the body to  
face to the reer  
which then  
becomes a  
front acciden-  
tall, and is the  
cause that the  
same com-  
mand reduceth  
the figure  
which first  
made it.



leaves, as lines: and yet all too little. But that I may keepe my selfe to my promise, and my Booke to its compasse: I will next come to shew some firings in the reere: and amongst my divisionall firings, I shall insert some other sorts of front firings, which here I have omitted.



CAMP. LXXXII.

Of dismarching, or firing in the Reere: the severall wayes, and how they ought to be performed.

**H**AVING so long maintained Battaille in the front, I will now face them about, and see how they will behave themselves upon their firings in the reere. \* Which kind of firings may be very beneficiall and serviceable, many wayes. For by keeping an orderly march, and firing in the reere, the eager enemy, (by too hasty pursuit) may be disordered. Or if it so happen (as many times it doth) that you have a disadvantageous place to imbatell on; by this firing you may march away: still preserving your order and array, untill you have brought your adversary into some ambushment, or such like inconvenience. \* For the manner of comming to the firing, it must either be by facing about, wheeling about, or countermarching: the Pikes are to be shouldered. The figure followeth.

\* The benefit and use of firing in the Reere.

\* Wayes to come to firing in the Reere.

*A firing in the Reere.*

Reere.

L

S m m m m a d d d d d d d d a m m m m S  
 w w w w w d d d d d d d d d w w w w w  
 w w w w w d d d d d d d d d w w w w w  
 w w w w w d d d d d d d d d w w w w w  
 w w w w w d d d d d d d d d w w w w w  
 S w w w w d d d d d d d d d w w w w w S  
 w w w w w d d d d d d d d d w w w w w  
 . . . . . d d d d d d d d d . . . . .

E

C

Front.

\* The direction  
for this firing  
in the reere.

\* The *Body* being upon a *march*; if the *enemy* appear in the *reere*; let the *last ranke* of Musquetiers face about, and give fire, wheeling off, by division, file-wise, marching up toward the *Front*, and there placing themselves before the foremost *ranke* of Musquetiers: (the *outmost* man of each *rank*, being the *leader up* of those which have fired) where first taking their places on the *out-side*, the rest wheeling about them, and ranking even with them on the *inside*; ever observing, that they *ranke even* with the *second ranke* of Pikes. The rest of the Musquetiers also doing the like: and in this manner to continue the *firing*, as occasion shall require. Nevertheless, of all the *figures* and *firings*, that ever I have seen, this hath been the *worst* performed in all places; which might easily be amended, if the *Souldiers* would observe this following direction: namely, when the *last ranke* of Musquetiers have presented

to

to the Reere, and are giving of fire; the *ranke* which marched next before them, doe then \* *blow*, \* Note upon all things in the reere, to blow your cole stepping forwards with your right foot. open, and present, at three motions: still keeping along even with the Body, until that, (lastly) they present to the reere; by which time, the *ranke* that last fired, will be wheeled away. The next *ranke*, so soone as the other hath presented, is likewise at 3. Open your motions, to doe the same; and so, successively, for all the rest; every *ranke* observing, upon each *ranke* nearer, firing, to loose one; and to march one *ranke* nearer, to the reere of the Battell: that so that part, may still be kept absolute. pan stepping forwards with your left foot, (a little inclining to that hand to which you are to face about) presents to the reere, stepping forwards with your right foot.

This giving of fire towards the reere for service, is to be continued; according to the quality of the place, the occasion for fight; and the discretion of the Commander. In exercise, we commonly doe it but once over; and then (if you please you may make *Alte*) and face your Body about, giving fire over againe: and charging your Pikes upon it: if need so requireth. Notwithstanding, if the horse shall still continue to pursue you in the reere, you having gained some strait or place of advantage, may \* *wheele* \* Wheeling of the flanks into the front or reere, is most usefull for small bodies. \* In Chap. 80. your flanks into the front, then face to the reere, and with your charged Pikes defend your Musquetiers: which (the body being so wheeled) will be in the reere. The body standing in this forme, the Musquetiers may sleeve up by way of Extraduction. \* The manner, you may perceive in the Chapter which treats of that figure. If the horse still presse forwards, cause the Pikes to charge at the foot, the Musquetiers giving fire over them, as in the Convex halfe Moone. \* Lastly, to reduce them, having thus fired, \* The reduce commandment.



command them to *wheele* their flanks into the front and to *face about* after their proper file leaders, and they are reduced.

\* A second order of firing in the the Reere.

\* Sometimes, we give fire in the *reere*, having all our Musquetiers *marching* in the *reere* of the Pikes. For the *manner* of the *motion*, it is as before: but for placing of the men, after they have fired; it may be different. As, to *wheele off by division*, placing themselves in the front of the Musquetiers, next behind the *reere* of the Pikes. Or if the *body* be large, to *wheele all off to the right*, through *Intervals*, and so to *march* into the front of Pikes. Or else, they may *wheele off by division*, and *flanke* their Pikes, and so fire over againe, as before. If you have brought your Musquetiers (by *firing*) to the *reere*, before the front of Pikes, \* then to *reduce* them, you may either *wheele* the *body* about, and give fire in front, causing your Musquetiers to *fall off by division*, and to *flanke* their Pikes, as you may perceive by the figure of the *Demie-hearse*. Or else if, you will *reduce* them without a *firing*, cause your Musquetiers to *open* to the right and left: and the Pikes to *march up in the midst*: after which, *facing* all to your Leader, they are as at first.

\* A reduction for this way of firing in the Reere.

I might have shewn a Figure for each of these severall *firings* in the *reere*; which would have delivered them with more variety: but I conceive that this here already exprest, may suffice: especially this being the ground of what may be spoken. Concerning *firings* in this nature, \* many men are of many minds, about this *firing in the reere*. Some will have it, that the *last ranke*, shall at one *motion*,

\* Many differing opinions concerning firings in the Reere.

face

face to the reere: and there present, and give fire. Other will have it at two motions; but either of them have their inconveniences. For however they pretend a more *sudden execution*, they are deceived: for would they make tryall, by causing the Muskettiers of one of the flanks, to give fire at one motion; and the Muskettiers of the other flank, at three motions, (as I have here set downe) they should soone finde,\*that the *firing* upon three *motions* were the best: and that the other would be cast so farre behinde their *body*, that they would be in some danger to be cut off. Besides this, they are longer in *clearing* themselves from their owne men, which all the while must stay, untill they are marched off: or else kill them, in stead of the enemy, whereas in this other firing upon three *motions*, they still *keepe* along with their Body, doing their *execution* more suddenly and more safely.\*Neverthelesse there be many so much wedded to their owne willfull opinions, that they will more willingly persist in a knowne error, then be seene to alter, what they have seemed to maintaine. But leaving such to steere by their owne compasse, I will here conclude my *firing* in the reere. And the next I shew, shall be firings in flanks: to which purpose, I passe all my Muskettiers to the right flank. The words of direction for it, are these.

\* Firing at 3 motions to the reere, the best.

\* There is no error, which hath not some slippery and bad foundation or some appearance of probability, resembling truth.

*Musquetiers of the right flanke, open to the right (or face to the right, and march.) When they have opened to a sufficient distance, then stand.*

*Muskettiers of the left flanke, passe through betweene your rankes of Pikes, to the intervalle on the right flanke: then stand, and face all to your leader.*



## CHAP. LXXIX.

*Of firings in flanke, in generall, and more particularly  
of the gathering firing.*



He Musquetiers being all on the right flank, (as in the last chapter is directed, it would be needlesse to make a Figure, whereby to demonstrate the standing of the body, seeing that none can bee so ignorant, but must needs know that all the *Musquetiers* being upon the right, the Pikes must be upon the left. \* Nevertheless, I shall endeavour to shew what is meant by *firing in flanks*. (Which for the generall) are of these 2 kindes. The first is, when the enemy skirmisheth with us in flank, as we march, th' other when as by some sudden attempt or ambushmēt, the whole body is engaged, and so forced to stand, and to face about to the right, or left, or both. By which *facings*, the flanks become *fronts accidental*, and their *firings* will be after the same manner of the *Firings in front*. Wherefore seeing I have already spoken sufficiently of them I will now shew *Firings in flanke, marching*: the particulars whereof, are as followeth. \* The first is for the outmost file, to give fire, and stand untill the next file have fired, which by some is called the gathering firing. Secondly, *firings in flanke*, and leading them up between the *Musquetiers* and Pikes, *firing in flank*, being led off by

\* What is  
meant by firing  
in flanke.

\* The diverse  
and severall  
of firings in  
flank marching





\* The direction for this firing.

This *firing* on the flanke, I have seene, and knowne used, by many good and able souldiers. Neverthelesse, in my opinion, the men stand in a great deale of danger, when having given fire, they can doe no good; but stand like so many markes for their *enemies* shot. Notwithstanding, it may be that such whom I have frequent'y seene to use it in their practise, may be able to render good reasons for the service; though as yet I cannot conceive it. I will therefore surcease any further to prosecute my opinions, and shew the manner of execution: which is to be performed as followeth. The \*Command being, to give fire to the right, presently the outermost file to the right faceth outward, and presents: the rest of the body, still marching forwards. Then the presented file, gives fire, and stands facing againe to their first front. By that time, the body will be marched cleere of the standing file, then the next outermost file, presents and fires, in like manner: the body marching as before. Having fired, they in like manner face to their first front, and stand, a Serjeant leading up the file, that fired fired on the out-side of the file that last fired. Then they stand both together, until the third file hath given fire after the same manner. And then the Sergeants lead up the two files, even with the third, which last fired. And after this manner the files of *Musquetiers* face to the flanke, and give fire, successively, and stand, untill the Serjeant leads up the rest of the files which fired, even with the front of the file, which last fired. Thus having all fired  
over

over, they are to march up againe, even with the front of Pikes, and this reduceth them, as at first



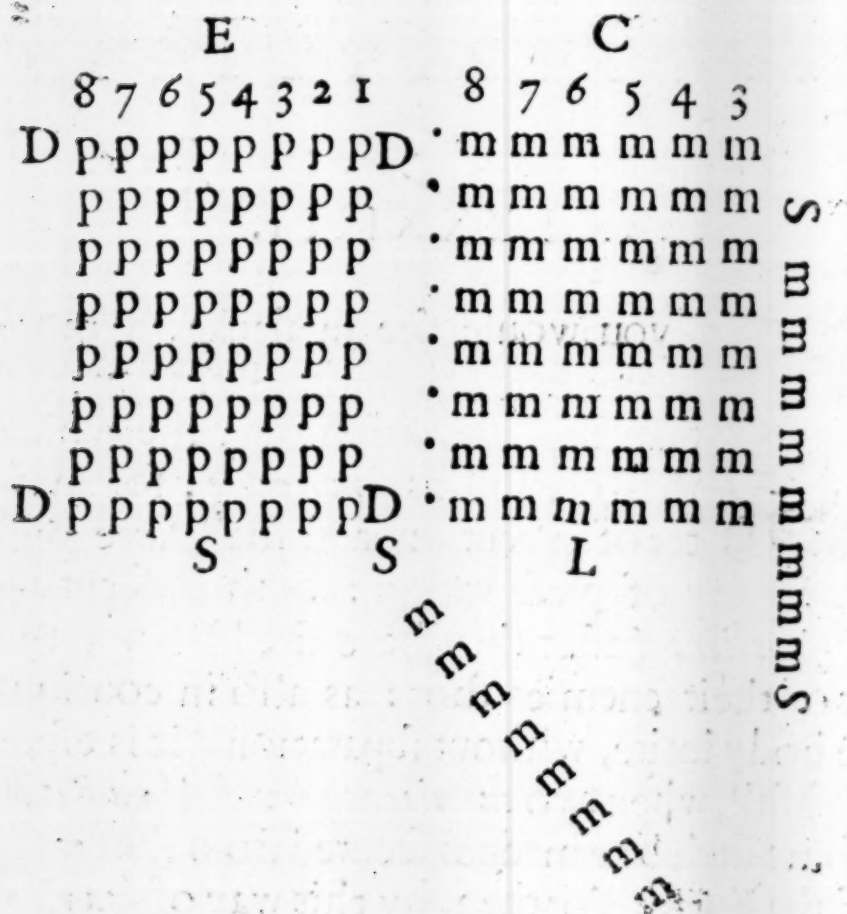
*The second manner of giving fire to the flanke.*

CHAP. LXXXIIII.

**I**f you would fire in flanke, a more secure way, then that last showne: take this way of firing, the which shall bee full as *serviceable*, for matter of execution, and shall farre preceed it, in way of preservation: both in securing the *Musquetiers* (after they have fired) from the danger of their enemies shot: as also in continuing the body intire, without separation. It is especially usefull, when two *enemies* are divided by a *River* or by some such like meanes secured from the *incursions* of the horse. For then, by this way of drawing the *Musquetiers* up between the *innermost* file *Musquetiers*, and the *outermost* file of *Pikes* to the right: your Battell may be continued, according to the occasion or the *Commanders* discretion. The Figure followeth, the Command is,



*Musquetiers, give fire in Flanke, marching up betweene  
the Pikes and Musquets.*



\* The way to performe this motion of firing, is as followeth. The outermost file being commanded to face to the right, and present, the rest of the body marcheth away, as in the other figure, and the standing File gives fire. This done, and that the body is marched cleere of the standing File, the next file presents to the right, & the file that first gave fire faceth to the first front, and is led by a *Serjeant*, crosse the  
the

the *reere* of Musquetiers, and up between the Musquets and Pikes; the Musquetiers are *still* to open to the *right*, as they *march*, that so there may be room for one *file* to *march* up *betweene* them, & the Pikes. And so (successively) each *file*, having *fired* *marcheth* up next unto the *right flanke* of Pikes. \* When all your Musquetiers have *given fire* once over, they are *reduced* as at the first. The *battell* may be continued, at discretion. The next firing in *flanke* (for the manner of execution) will be all one with this: the difference will be, in the *wheeling off*, and placing the Musquetiers after that they have *fired*.

\* The firing being performed once over, they are reduced as at first.



CHAP. LXXXV.

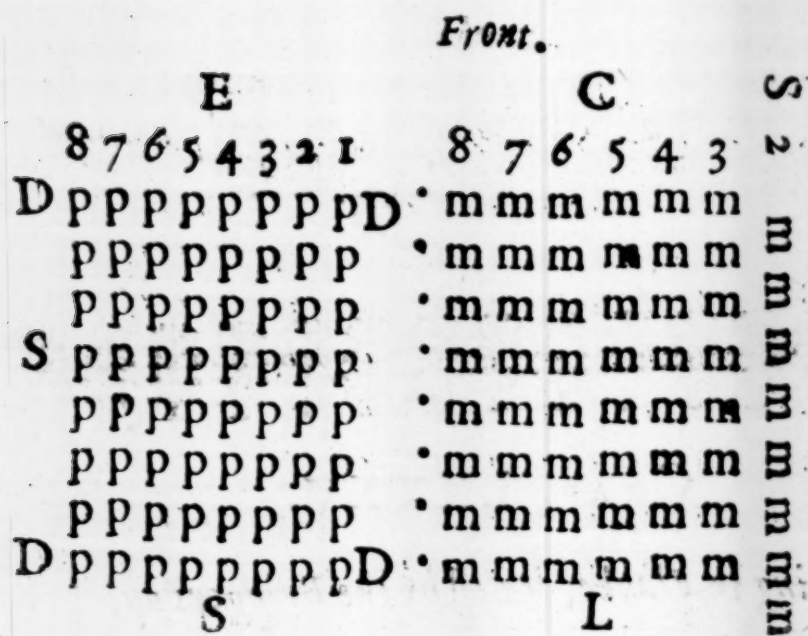
*A firing in Flanke, led off by the Bringers up.*

**T**He next firing in *flanke*, which I propound to your perusall, will be nothing differing for *manner of execution*, from the firings in *flanke*; formerly shewed. The onely difference arising betweene them, is, that the other *files* of Musquetiers, after that they had given fire, were *led off* by their proper *file-leaders*; and this, to the contrary, must be *led off* by their *Bringers-up*. \* And this indeed, if the *body* be upon a *slow march*, is the *readiest* and *quickest* way: and doth more

\* The use of this firing in flanke.

more speedily secure the *Musquetiers*, after that they have given Fire. The words of command and direction, which produce the Firing, are as followeth.

*Musquetiers give fire to the right: wheeling off, after your Bringers up; and placing your selves betweene your divisions.*



S  
w  
m  
m  
m  
m  
m  
w

\* For the manner of execution, or way to performe this Firing, it is as followeth. The body must bee conceived to be marching, upon all these Firings in flanke: and that with their Pikes shouldered. This being presupposed, the Command being given, the *outermost file presents* to the right, and gives Fire: then faceth to the right, after their bringers up, who leade them off, crosse the reer of *Musquetiers*, marching

ing



ing them up betweene the divisions, the bringers up supplying the file-leaders place; and marching even in ranke in the front, with the file-leaders; the file-leader of the same file, becomming the bringer up in the reere. The files of Musquetiers, or Pikes (according as the command shall be given) are as they march, to open; thereby giving way to the Musquetiers, after they have fired; to come up betweene the divisions, and so soone as the first file that fired, is cleare from the right flank; the second file, presents and fires; in like manner wheeling off, as before, and marching up betweene the Pikes and Musquetiers; every file successively, giving fire, and wheeling off as aforesaid. This firing may be performed, once, twice, or oftener over: according to the discretion, of the Commander. \* Nevertheless, if it be twice performed, the men are reduced as at first; every man having his right place. If you fire them but once, or thrice (or any odde number of time) over, then you must countermarch your files of Musquetiers to reduce them. \* There is another way for the bringers up to wheele off, and each of them to leade off his file; untill he comes to the reere of the division which is betweene the Musquets and the Pikes; and there he is to stand, and ranke with the bringers up, the rest that follow, passing on forwards, by way of Introduction, and every man ranking before him, that was his leader in the wheeling off; untill the proper file-leader be come into his place againe. And after this way, they give fire; each firing being his owne reduction.

\* The first firing is reduced by doing the same over againe.

\* Another way of placing the Musquetiers, when they are led off by the bringers up.



## CHAP. LXXXVI.

*The differences betweene Firings in Flanke, marching:  
and of bringing the Musquetiers on the  
out-side of the Pikes.*



**A**LL, or the most part of the firings in flanke, which are performed *marching*; in point of execution, are the same: the especiall difference betweene them, being either in the manner of the *wheeling off*, after they have fired, or in the *materiall* placing them, whereby to make them more *offensive* or *defensive*. And this appeareth by the next following *firing*: which is to be used at such time and place, when as there may be doubt of the *enemies horse*: And, therefore, for the more security of the Musquetiers having fired, they are to be *drawne up* on the *outer side* of the *left flanke*: \* if haply there may be some *hedge, ditch, river, hill, marish, wood*, or such like convenient *safeguard*; whereby to shroud them from the *furie and violence* of the *horse*; that so the Pikes, making *Alt*, and facing to the *enemy*, may *charge*, and with their *armed points* (strongly and closely coucht) *receive* and *abate* the fury of the first *shocke*. And if need be, the Pikes may all *charge* at the foot, closely *serried* together, with their *swords* drawne, and the Musquetiers may *give fire* over them. The manner you may perceive in the figure

\* Situation of place, often affords good helpe in time of need, to the artfull and industrious Soldiers.

*Musquetiers, give fire to the right: placing your selves on the outside of the left Flanke of Pikes.*

E C  
 S 1 8 7 6 5 4 3 2 1 8 7 6 5 4 S  
 m<sub>D</sub> p p p p p p p p<sub>D</sub> m m m m m m  
 m p p p p p p p p m m m m m m  
 m p p p p p p p p m m m m m m  
 m p p p p p p p p m m m m m m  
 m p p p p p p p p m m m m m m  
 m p p p p p p p p m m m m m m  
 m<sub>D</sub> p p p p p p p p<sub>D</sub> m m m m m m  
 L S  
 Reere.  
 2  
 m m m m m m m m

\* The *outermost* files having presented to the right; the rest of the *body* continueth the *march*, whilst they in the meane time, are giving fire. Which being done, and the *body* cleere, the next *outermost* file, presents;



\* It is good to accustom the Pikes to charge.

\* They may be reduced by interchanging of flanks.

presents the file that last fired, in the interim, facing to the left after their proper file-leader; who leadeth them *croſſe* the *reere* (both of Musquets & Pikes) a pretty round pace; *fleeving* up on the out-side of the left *flanke* of Pikes. The next file having in like manner, fired; doth also *troupe* up on the out-side of the file, led off before; every file giving fire, and doing the like.\* When all have given fire, and are cleared away, then the Pikes may charge. Which is very necessary, to accustom the *Souldiers* unto in times of exercise, both for charging on, and retreating, as also to push with their Pikes, that so by practise they may be able to doe it, orderly, either way: still keeping their order and array. Having given fire upon the right *flanke*, and drawne all your Musquetiers in this manner to the left *flanke*, if you will cause them to give fire on the left *flanke*, and bring them backe againe to the right *flank* they will be reduced.\* Or if you would reduce them without a firing, then either *paſſe* your Musquetiers through betweene your *rankes* of Pikes, or else let your whole *division* of Musquetiers, be drawne *croſſe*, either the *front* or *reere* of Pikes, into their places: or by *division* (if you please) your Musquetiers, also, may give fire in *flanke*: the first file *fleeving* up on the left *flanke*: the rest of the files, still falling betweene the Pikes: and the Musquetiers which wheeled off the last before them. And this is also a very good firing, and may be reduced with doing the like back againe: & many other wayes, they may also fall off after the manner of the figure last shown: being led by their *bringers* up, either into

into the *front*, or else after the manner as is discoursed in the latter end of the last *Chapter*. But I endeavour, all I may, to contract my matter, lest my *volume* should exceed my intent. And therefore I will shew but one *fireing* more in *flanke*, upon a *march*: wherewith I will conclude these sorts of *firings*.



## CHAP. LXXXVII.

*Of Fireing in Flanke, and placing the Musquetiers in the midst of the Battell of Pikes: with other firings from thence proceeding.*

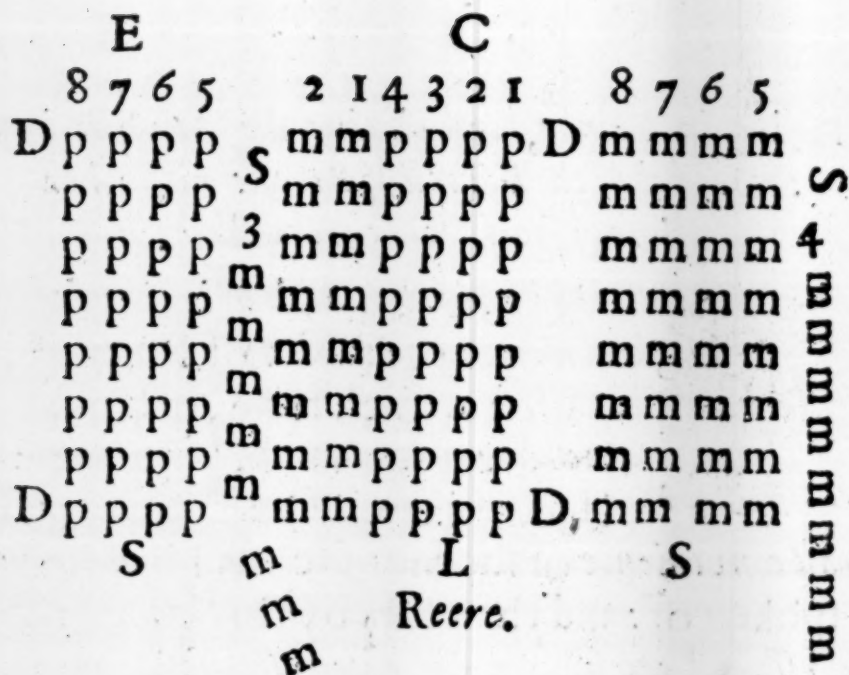
**F**iring in *Flanke*, and bringing them off betweene the midst of Pikes; \* is to be used at such time, when as you would secure your Musquetiers: the place (otherwise) affoording no naturall convenience of succour, such as I have formerly spoken of: and therefore by this manner of *falling off*, where wee want naturall assistance in the *scituation*; there, art ought to supply us, namely, by contriving to bring up the Musquetiers betweene the Pikes, and so to defend them from the furie of the *horse*. And, if need be, you may draw 3. or 4. files of Pikes (more or lesse, according to your number or the *danger*) crosse the Musquets both in *front* and *reere*, which are in the midst betweene the Pikes, which will as well preserve the Musquetiers in

\* The use of this firing.

in front and reere, as in flanks. But leaving further to discourse, what may be done; I will now shew how this is to be done. Onely first take the words of Command and direction for the firing, as followeth.

*Musquetiers, give fire to the right: Marching up betweene the midst of Pikes.*

*Front.*



\* The direction for this firing.

\* The Command being given, for the *outermost*. file to present to the *right* (as formerly in the other firings in flanks) the rest of the body still marcheth on: untill that the *outermost* file hath fired, and is faced to the *left* againe: following their leader. He now leading them off to the *left*, marcheth up betweene the *middlemost*-files of Pikes: who are then to open

to



to the *right & left*: so to give them roome to march up between them. In the meane time, the *next file* having given fire, *wheeleth off*: in like manner *marching up* on the *left* of the *file*, which *fired* last before them. And so successively, for all the rest of the *files* of Musquetiers, all which are to give fire, & to *wheele off*, as aforesaid: placing themselves still on the *left* of the *files* which *last fired*. Wherein is still to be noted, that the *files* of Pike men are still *open* to the *right & left*, and that for the receiving of the Musquetiers, after that they have given fire. This *firing* (as all other the *firings* in *flanke*) may as well be led off by their *Bringers up*, as by the *file-leaders*:

and then the *reducements* will be answerable. \* The Musquetiers having all *fired*, the Pikes may charge at discretion. The *Bow-pike-men*, which are in the *reere* of the Musquetiers, in the meane time not sparing to send their *showers* of *arrowes*, amongst the thickest of their enemies, and if need require, the *front* of Pikes *charging* at the *foot*, with their swords drawn; the Musquetiers may give fire over them, rank after rank; for the *formost* ranks having *fired* may *kneele* upon the ground; and there make *ready* againe: untill the other *ranks* behind them, have likewise given fire. After this manner, the *Battell* may be continued: according as occasion shall require.

\* For *reducement*, & to bring the Musquetiers into both *flanks* againe; as they were before I began these *firings* in *flank*, command your Pikes to face *inward*; and your Musquetiers to the *right* and *left outward*, and so to passe through and *interchange* ground; then facing them to their leader, they will

\* Whilst the first division of Pikes charge, the Reere division of Pikes (having bowes) may doe good service against the horse.

\* The reducement.

be *reduced*, as at the first. I would have the ingenious Reader to conceive, that all these *firings in flank*, may as easily be performed to the *left*: and with the same words. Onely the words of *right*, must be changed for *left*, and *left* for *right*. I might have further enlarged my selfe upon *Firings in flanke*: but these already exprest, may suffice for to instruct the ignorant. As for the skilfull and experter sort of *Souldiers*, I shall rather request their approbation, then presume to write ought, which may seem to passe me with the least conceit, tending to their instructions. Wherefore, for the further prosecution of my intended discourse, I will next shew some *divisionall firings*. And (for *methods sake*) I will first begin with *Firings in Front*, and *Reere*: which may be performed either *marching* or *standing*. And to that end, suppose your *Musquetiers* to *march* all in *front* and *reere*. \* Neverthelesse, because it will not be amisse, to shew with what words of *command*, and *direction* the *Musquetiers* may be brought thither: therefore take notice from what part of the *body* they are taken. And if they be in the *midst* (as by this last *firing in flank* they were brought) then *command* the *halfe files* of the *Musquetiers* to *face about*: which done, let the *Pikes* stand, and the *Musquetiers* *march*, untill they are cleare both of *front* and *reere* of *Pikes*, then let them stand, & *face* to their *leader*: which being done, your *battell* will stand in forme of an *hollow square*. In which *hollow*, may be conveyed any *carriage*, or such like. But if you will not have your *battell hollow*, then *command* your *Pikes* to *close* their *divisions*, and the *Musque-*

\* The direction how to bring the *Musquetiers* to the front & reere: either from the midst, or flanks.

tiers will be all in front and reere. If your *Musquetiers* be on the flanke, and you would bring them into the front and reer, then after the same manner let the half files of *Musquetiers* face to the reere: and then both halfe files of the front and reer, march untill they are cleere of the Angular pikemen. This done, let them face in opposition, and close their divisions: after which, having faced all to their leader, they will be rightly placed, namely, the front-halfe-files of *Musquetiers* before the front of pikes, and the reere halfe-files of *Musquetiers* behinde the reere of Pikes. Thus will the battell be in forme of an hearse, and the *Musquetiers* be ready to give fire to the front and reere, either marching or standing. But before I begin my divisionall firings; I would intreat you not to expect, that I should reduce every particular firing, so soone as it is performed; as I have done by these hitherto shewed, but rather let it be sutable to your likings, that I reduce firings by firings: sometimes giving fire upon a march: sometimes upon a stand, sometimes to the Front and reere, sometimes to both flanks. I doe the rather desire to goe on in this way, because thereby I may expresse farre more matter, in fewer lines, and shorter time.

\* Your figure takes the denomination of a hearse, when the depth doth manifestly exceed the length, which must be thrice at least.





## CHAP. LXXXVIII.

*Of firing to the front and reere, upon a march.*



He Musquetiers being all placed in the front and reere ( according to the directions in the last Chapter ) I will now shew the manner of firing to the front and reere, upon a march. Which howsoever that it may be rare, and feldome usfull in service, yet it must needs bee excellent for practice. For by the often useing it, the Souldier may bee made capable of any firing: The Pikes (you are to understand) are to bee shouldred. The Command for the firing is,

*Musquetiers give fire to the front and reere, and flanke your Pikes.*

*Front.*

	S	m m m m	c	m m m m	S
		m m m m		m m m m	
m m m m	D	p p p p		p p p p	D m m m m
m m m m		p p p p		p p p p	m m m m
		p p p p		p p p p	
		p p p p	f	p p p p	
		p p p p		p p p p	
		p p p p		p p p p	
m m m m		p p p p		p p p p	m m m
m m m m	D	p p p p		p p p p	D m m m m
		m m m m		m m m m	
	S	w w w w	L	w w w w	S

*Reere.*

\* The

\* The Command being given (as above said) the first ranke presents, the last ranke faceth about to the reere, and doth the like, and so both giving fire together, wheele off by division. The one halfe of the ranke, following after the right hand-man of the same ranke, the other halfe after the left hand man, who leads them close downe by the side or flanke of the Musquetiers, untill they come to the Pikes. The first ranke of Musquetiers now rancking even with the first rancke of Pikes, the last ranke of the Musquets, with the last ranke of the Pikes, leaving a sufficient intervale betwixt them and their Pikes, for the other Musquetiers to march betweene. And here you must note, that hee that was outermost when they gave fire, must likewise bee outermost when they have taken their places on the flanke. The first and last ranks having fired and wheeled off, the next ranks (marching on, three or foure steps) are in like manner to present, and give fire, wheeling off by division, and passing betweene the divisions \* there placing themselves, they of the front division behind those which fired last before them, and they of the reere division before them which fired last, behind them, and so they may continue to give fire after the same manner, untill they have all given fire once over. \* Then may the body make a stand, and the Pikes charge to the front and reere, if need bee. Or if the Commander would continue his firing to the front and reere still upon the same figure: Then let the Musquetiers of the front, place themselves, (after they have given fire) behinde the Musquetiers of their owne Division: those of

\* The direction to the firing wherein you are to note, that the Musquetiers who are to fire in front, are to move three or foure paces before the rest of the body, that so they may have fired and wheeled away before the rest of the body be so farre advanced.

\* Note this direction.

\* If need bee the body may make Alt, and charge to the front and reere.

the reere division placing themselves betwixt the reere of Pikes, and the Muskets of their owne division, and so the body moving but slowly forwards, they may continue the firing. Having given fire to the front and reere, and flanked their Pikes: if the occasion offer, or the Commander please: they may give fire to the front and reere, upon that Figure which indeed I hold the better, as you may perceive in the ensuing Chapter.



### CHAP. LXXXIX.

*A second way of firing to the front and reere.*



His second way of firing to the front and reer upon a march, may easily be performed, if the Souldiers be well & often instructed. Without which, all matters in the *Art Military* will seeme difficult, and by which, all things will be made facile and easie, I could instance in diverse motions and figures, by some reputed superfluous niceties, which were the true uses knowne to the Commander, and the way to execute to the Souldier would be found to be of singular good service. \* Neverthelesse, because to the ignorant, nothing beyond their capacities may seeme excellent, many good and serviceable motions are slighted

\* Ignorant Souldiers account those things niceties which they understand not.



ted and not accounted fit for service. But I could well wish, that some good course might be taken, that the souldiers of our trayned bands might have a little oftner practice, that so they might be able (as least in some reasonable way ) to understand and *exercise*, what shall be commanded them. But I have strayed from the matter, and therefore take these words of command and direction, which being orderly executed, produce this figure following.

*Musquetiers, give fire to the front and reere, placing your selves betweene your divisions.*

*Front.*

C

S	m m m m m	D	P P P P P	P P P P	D	m m m m m	u	S
	u m m m m		P P P P P	P P P P		m m m m m	u	
	u m m m m		P P P P P	P P P P		m m m m m	u	
	m B		P P P P	P P P P			E u	
	m B		P P P P	P P P P			E m	
	m m m m m		P P P P P	P P P P		m m m m m		
S	m m m m m		p p p p p	p p p p		m m m m m	m	S
	m m m m m	D	p p p p p	p p p p	D	m m m m m		

L

*Reere.*

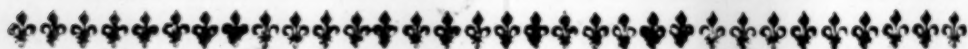
\* The way to performe this firing is as followeth (the command being given) the first ranke advanceth three or foure paces before the front of the body, there presenting and firing: the last ranke of Musquetiers, in the intirim, presenting at three motions to the reere, and there in like manner Firing, which done, they are to wheele off to the

The direction  
for this firing  
to the front  
and reere.

R 3

right

right and left, placing themselves between the Musquetiers of their owne divisions. Those namely, which were of the front halfe files, falling into the reere of their owne division, those of the reer half files (contrariwise) falling before their halfe-file leaders, and rancking even with the halfe-file leaders of Pikes, the next rankes successively, firing and wheeling off, after the same manner. \* Having fired once over, they are reduced, every man to his place. These two last firings to be performed upon a march, would seem very difficult to unexperienced Souldiers, but by often exercising they may be made capable of these, or of any other.



### CHAP. LXXX.

#### *Firing to the reere and right flanke marching.*



The use of  
this firing.

Having already shewn firings in front reer and flankes, (some marching, & some standing) I will now shew one firing to the reere, and right flanke, upon a march. The which without all question must bee very \* serviceable at such times, as the obsequious and vigilent enemy, shall find some opportunity to skirmish with the body, seeking to annoy them in their passage or march, charging them in the reere and flanke, at one, and the same time. I shall not need with arguments to enforce the usefulnessse of the firing, for none that knowes any thing in the Art Military, but will ingeniously

geniously confesse, that in time of motion, either advancing, or retreating out of an enemies country, they shall be sure upon all advantages to be waited upon by enemies, charging in this nature.

I might be infinite in examples of this kinde, both ancient and moderne, but my intent is not to write a History, every house and shop being sufficiently stor'd with workes of that nature, and my task being only a few directions, for the better improvement of the exercise of foot companies, the which I have hitherto indeavoured, to keepe my selfe close unto, and not flowne out into extravagant and foraigne discourses. Although I cannot deny, but that the seasonable recitall, and intermixture of History, would much have beautified and imbelished the worke, as delivering it more fragrant to the sense, and conducing, with more delectation to the benefit of the memory: but it is not my intent to raise my labours, to so large a volume, nor indeed can I spend so much time from my more necessary affaires, But shall rest well contented, to leave such large labours to the abilities of the learned, who with their artfull inventions may be able to garnish out their works, with more attracting termes, whilst I in the meane time, according to the measure of my talent, prosecute my ensuing discourses. You may, if you please) fire to the flanke and reere: your Musquetiers being in their ordinary places, on the flanks of their pikes. \* Neverthelesse a securer way for the Pikes, will be to draw the Musquetiers from that flanke, which is in least danger, crosse thereere of Pikemen. And



shall be the way He observe in this *firing*: the words of Command for this Firing are as followeth.

*Musquetiers, give Fire to the right and reere, placing your selves betweene the Pikes, and your owne divisions.*

*Front.*

	E		C	
D	p p p p p p p p	D.	m m m	
	p p p p p p p p		. m m m	
	p p p p p p p p		. m m m	
	p p p p p p p p		. m m m	
	p p p p p p p p		. m m m	
	p p p p p p p p		. m m m	
D	p p p p p p p p	D.	m m m	
	L		S	
	.	.	.	.
	m m m m m m m m			
	m m m m m m m m			
	m m m m m m m m			
	S	u u u u u u u u	S	

*Reere.*

\* The direction for this firing.

\* The command being given (to Fire to the reere and right flanke) the outermost File of Musquetiers present to the right, and the last rank of Musquetiers present to the reere, and so both give Fire: the rest of the Body, in the meane time, marching apace: the right hand file, and last ranke having fired; the file faceth to the left, after their file leader; and so marcheth up between the Muskettiers of the same division, and the Pikes; the ranke wheeling

ling off to the right, and placing it selfe next after the reere of Pikes, and before the first rank of Musquetiers of the same division. \* If you please, you may make an *Intervalle* between the Musquetiers: that so part may wheele off to the right, on the outside, and the other part wheele off to the right, & march up betweene the *Intervalle* into their places. The first file and rank that presented, having given fire, and wheeled cleere off the body, the next file and rank, present and give fire: after the same manner, wheeling off, and taking their places, as aforesaid; and so successively, the rest (both files and ranks) give fire, observing the same order. And having given fire, once, twice or oftener over, they are still reduced to the same they were before the firing began. \* Then draw your Musquetiers from the reere, to the left flank againe; and they will have their places as at first.

\* If there be too many, to wheele off together, then make one *intervalle*, or more, as the occasion requireth.

\* The reduction.

CHAP. LXXXI.

Of firing to both flanks, marching.



Firing, to both flanks marching, without all peradventure are as requisite to be practised in times of exercise, as necessary to be used in times of danger: when the politick and nimble enemy, shall lie beating upon your flank, thereby seeking to distresse you in your passage, or force you to Alt, perhaps to your greater disadvantage. For the manner or way to performe the firing; it must have reference, to the time, number, place, and strength of the enemy: with other like circumstances considerable, by the discret and well advised

fed Captaine: and accordingly to draw off his Muskettiers, either for securitie, or advantage. Somtimes placing them betweene their own divisions, and the pikes (as in this following firing) at other times, placing them, \*between the midst of their pikes, the better to secure them.

Divers other such like waies there likewise be, at the discretion of the Commander: and as the present occasion shall require. But because I insisted somewhat largely upon the firings on the right flanke; I shall not need to shew them againe, by division on both flankes; but will conclude them all in this one. The words of Command which produce the firing are as followeth.

*Musquetiers give fire to both flankes, and then place yourselves betweene the Pikes and your owne divisions.*

*Front.*

E C

	m m m	▷	p p p p p p p p	▷	m m m	
S	m m m		p p p p p p p p		m m m	S
m	m m m		p p p p p p p p		m m m	m
m	m m m		p p p p p p p p		m m m	m
m	m m m		p p p p p p p p		m m m	m
m	m m m		p p p p p p p p		m m m	m
m	m m m		p p p p p p p p		m m m	m
m	m m m	▷	p p p p p p p p	▷	m m m	m
	S		L		S	

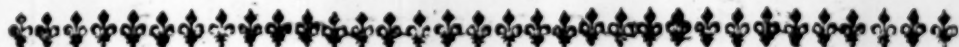
*Reere.*

\* The direction for this firing.

\* The command being given, the outermost file (on each flanke) presents outward, the rest of the body



still continuing the march. The presented files (in the interim) giving fire; then facing after their proper file-leaders, who are to lead them up betweene the Muskets of their *owne divisions*, and the Pikes. ) In the time of their *wheeling* away ) the next two files present, firing after the same manner, and leading up as before. The rest (succesively) doing the like, untill they have fired all over: which brings them to their former places.\* The firing may be continued at discretion; each firing being its owne redcement. Neverthelesse it may so fall out, that either through the fury of the enemy; advantage, or disadvantage of ground (or some such like accident) the body may be forced to make Alt; and to face to both flanks; and so with fronts accidentall, to maintaine the fight, standing. To which end, the firing in the succeeding *Chapter*, shall be of that sort. Therefore suppose the body faced to the right and left, preparing to give fire.



C H A P. X C II.

*A firing to both Flanks standing.*

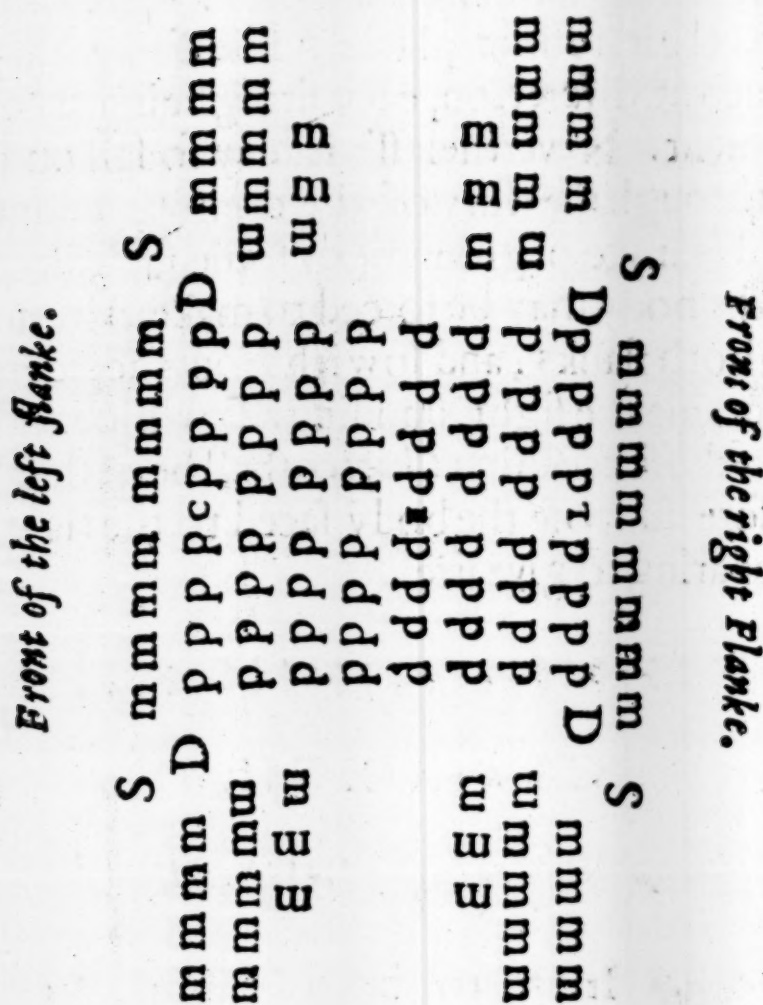


Firing to both flanks, upon a stand, is a good and serviceable firing. And although it shew but thinne, in the figure; yet it may be usefull for the field: especially if there bee a larger proportion of *number*, then I have made use of in my formes and figures of

of Battell. The words of command and direction, which produce the figure, are as followeth.

*Advance your Pikes and stand, Face to the right and left, Musquetiers give fire, and flanke your Pikes.*

*Front of the march.*



\* The direction for this firing.

\* The body being faced to the right and left, the formost ranks of Musquet. (which were the outermost Files) present and give fire, and then wheele off by

by division, ranking even with the formost ranks of Pikes, and leaving sufficient Intervals for the rest of the Musquetiers, to march betweene them and the Pikes. The next ranke presenting and firing, after the same manner, \* but not advancing forwards: only firing upon the same ground, and wheeling off by division; afterwards passing downe betweene the intervals, and so ranke after their leaders. It is herewithall to be noted, that they that were outermost, when they gave fire, are likewise to be so when they have taken their places, If these instructions be not sufficient, turne backe to the figure of the \*Demie-hearse: where the manner of the execution is all one with this. All the rancks of Musquetiers have fired and wheeled off as before; the Pikes if need be may charge, and the Musquet. give fire over againe, wheeling off outward, & placing themselves in the *reer of their owne divisions*, having advanced your Pikes, and faced your body to the first front, all your Musquetiers will be in front and *reer*. \* And then if you face your half-files about, and give fire after the same manner to the *front & reer*, having faced them againe to their first front, they will be reduced, as at first, into their ordinary square. Neverthelesse, I will reduce it by another firing, which was first invented & shewed us by that worthy *Citizen*, and excellent *Souldier*, Capitaine *Henry Waller*, now deceased, It is a firing in front, the Musquetiers of the *reer division*, opening to the *right and left*, and *sleeving up on the flanks of pikes*, untill the leaders of the *reere Division* (who as then are the *halfe-file Leaders*) ranke even with the

\* Upon some occasions it will be necessary for the Musquetiers & Pikemen to advance into the leaders ground, but then such direction will be given.

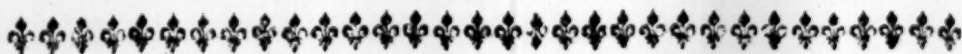
\* The Demie-hearse, in Cap. 76.

\* This facing brings all the Musquetiers to the front & reere, if you would bring your Musquetiers into their first place, let them give fire and wheel off as before, which will reduce them againe to the flanks.

front



front of Pikes. The words of direction that produce the figure, follow in the next chapter.



### CHAP. XCIII.

*Captaine Wallers Triple firing to the Front.*

\*The Bowfast-  
ned to the  
pike, may doe  
good service:  
where the  
souldier is  
skilfull, and  
the enemy  
comes within  
their danger.

**T**His Triple firing to the Front hath had the approbation of good and well experienced Souldiers, who have all acknowledged it to be both solid and serviceable. Bringing many hands to fight in very good order, the Pikes being securely covered by their Musquetiers in front, neither need they bee idle in time of battell if they have any \*Bow-Pike men amongst them, for that they may send their whisteling Archery over their Musquetiers heads, without offence to their Friends: though not without damage to their Enemies. If any carpe at the depth of the Musquetiers (either in this figure or in any other in this booke) I shall request them to suspend their censures, and wisely to conceive by a little, what a great deale meaneth. My intent not being, to make my book *monstruous* by having little leaves, and large figures. Only I desire with this smal number to shew the nature of severall formes and figures of battel, the manner of their *firings* and *wheelings* off, their orderly placings, and severall wayes of reducement: not having the least conceit to induce any to believe, that men are able long to  
continue

continue battell at foure deep, although at (sometimes, and for stratagems) they may be reduced into a lesser number. But lest by digression, I too far trespass upon your patience, I will returne to shew the manner of the firing. Onely first observe the words of command and direction, which produce the following figure.

*Musquetiers of the reere, double your front of Pikes by division.*

*Front.*

S : m m m m m m m m : S		
: m m m m m m m m :		
: m m m m m m m m :		
: m m m m m m m m :		
: D E C D :		
S : m m m m	: p p p p p p p p	: m m m m : S
: m m m m	: p p p p p p p p	: m m m m :
: m m m m	: p p p p p p p p	: m m m m :
: m m m m	: p p p p p p p p	: m m m m :
: . . . .	p p p p p p p p	: . . . . :
:	p p p p p p p p	:
:	p p p p p p p p	:
:	p p p p p p p p	:
. . . . D	p p p p p p p p	D . . . .

L

*Reere.*

\* The Command being given, the first ranke of Musquetiers (both of front and flankes) present to the front & give fire: wheeling off to the *right* and *left by division*. The *Musquetiers* of the *front division* being

\* The direction for this firing.

\* The Muskettiers having fired once over, they are reduced againe into flanks.

being wheeled off (as aforesaid) close by the *flanks* of their *owne* Muskettiers, passe directly downe betweene the intervals : and place themselves even in ranke behinde the Muskettiers of the reere division, which are upon the flanks, This you may perceive by the pricks, that come downe betweene the Intervals: the Muskettiers also, that fired at the same time on the flanks ; wheele off in like maner ; (the right flanke to the right, the left flanke to the left) marching directly downe , even with the reere ranke of pikes ; and there place themselves againe even in ranke with the last ranke of pikes. This done, the rest of the ranks ( successively give fire , and doe the like : every *Ranke* taking his place, after the *ranke* which *fired* last before them; the other *ranke* moving one *ranke* forwarder.\* The *Muskettier* having *given fire* once over ; and *falling off* according to this direction, they will be reduced to the flanks againe, as they were at the first. The firing may be continued, or the pikes may charge, at discretion of the *Commander*.





CHAP. XCIIII.

*A firing tripartite, doing execution to the front, reere,  
and right flanke.*

**F**igures and formes of Battell, may bee infinite: according to the judgements of the *Commanders*, and the various workings of the divers *motions*: no *art* nor *science* yeelding more content, unto the studious *practitioners*; none more *honorable* and *beneficiall* for the good of our *Country*: none more *neglected* and *lesse countenanced*, then the *practisers* of the *Art military*, nor none more *scrud-up* in the places of their abiding then those men this way affected. The rich *cub'd gowne men*, holding it as a *maxime*, that *Souldiers* (though never so poore) yet they must be taxed in the parish bookes like *Gentlemen*. Thus much incouragement we have, for spending our money and our time for our *Countrys* good, and this (in good time) I hope will be amended: but of this no more. The next *firing* being a *firing tripartite*: doth execution to the *front*, *reere*, and *right flanke* at one and the same time. For the *use*, I shall referre it to the judgement of the *Judicious*: for the instruction, how it is to be *made*, the words of *Command* and *direction* shew it, which are as followeth.

The common  
speech being (oh  
let him pay) he  
hath many e-  
nough to spend  
upon his exerci-  
ses of Souldiery.



For the manner of the *firing*, it is ordinary: <sup>The firing.</sup> the *foremost rank* of *Muskettiers* (on each part) having *fired*, they *wheel off* to the *right*, or to the *right* and *left*: (according as directions shall be given) placing themselves in the *reere* of their *owne divisions*; the *next ranks*, in the meane time, *moving forwards* into their *leaders ground*; there in like manner, *firing, wheeling off*, and placing themselves as before: the *rest of the ranks*, successively doing the like. This *firing* may be continued, at pleasure of the *Commander*. The *Pikemen* (as advantage may be given) in the *interim* either *porting, charging*, or sending their *fatall showers* amongst the thickest of their *enemies*. Lastly, for *reducement*, <sup>Reducement.</sup> face them all to their *front proper*, then *Command*, *halfe ranks that doubled*, to face to the *left*, and so to *march into their places*. For further *directions*, turne backe to the 27. Chapter, which shewes the *reducement* of the *aforegoing Figure*, &c.



CHAP. XCV.

Of the Sconce Battell.

**T**HE *Sconce Battell* is a *Figure* most properly fit for a whole *Regiment*; at least for a larger proportion of *number*, then is here exprest; it neither being *good* nor *safe* to divide a small *Company*, into so many *divisions* and *Maniples*. And yet to give satisfaction unto some, I have placed



For if it were made with a Regiment, Brigade, or larger body: it would require other words of direction, but be nothing more difficult.

it here amongst my *Figures* and shew the way, how to make it with a *private Company*. For the manner or way how to *fire upon it*, may be divers. The *Muskettiers* being so placed, that they may *give fire* to the *front* and *reere*, to the *right & left*, or to all *four* together, at the discretion of the *Commander*. If your *Muskettiers* *give fire* to the *front* and *reere*, (every *ranke* making good his *leaders ground*) then the *Figure* will still continue the *same*. If they *give fire* without *advancing* into their *leaders ground*, then the *Muskettiers* will *ranke even* againe with their *pikes*: and the *figure* will become an *hollow crosse*, the *Muskettiers* making the *Angles*. The words of *Command* and *direction*, which produce the *Figure*, are as followeth.

*Halfe files of Muskettiers, face to the Reere.*

That being done,

*Command all the Muskettiers to march to the Angles of their pikes.*

Next cause

*The two first and two last rankes of Pikes to stand.*

*The rest to face to the right and left; and march, untill they are cleere of the other pikes, then stand.*

Lastly Command.

*The two first and last rankes of pikes, which did not move, to double their Files to the right.*

These words of *Command* and *direction* being executed, perfect the *Figure*, as followeth.

The Sconce Battell.



Many and severall are the *firings*, which (with some little *alteration*) may be drawn from this *Figure*. Neverthelesse not to spin out time with discourse, the *firing* now *intended* to be *shewn*, is to be performed to the *front* & *reere*. To which purpose, the one *halfe* (both of *Muskettiers* and *pikes*) are to face *about* to the *right*; there *presenting* and *giving fire*: those of the *right flanke*, *wheeling off* to the *right*; the *left flank* to the *left*; and *placing* themselves in the *reere* of their own *divisions*. The *next ranke* still *moving forwards* into their *leaders ground*; the other *rankes* (succesively doing the like

*By subdividing and new placing some of the divisions.*

like. After this manner, the *firing* may be continued, and the *Figure* still preserved.

*The reducement* For *reducement*. First, *face* them all after their proper *file-leaders*. Secondly, cause the *front* and *reere divisions* of *pikes*, to double their *rankes* to the *left*. Thirdly, *command* the *pikes* of the *flankes*, to *face*, in *opposition*; close their *divisions*, and then to *face* after their *leaders*. Next, *cōmand* the *Muskettiers* of the *front division*, to *face* to the *reere*. Lastly, *command* the *Muskettiers* (both of *front* & *reere* to close their *divisions*. And then being *faced* to their *leader*, they are perfectly *reduced*, as at first.



## CHAP. XCVI.

*Of firing by three files at once; two of them standing oblique, the other direct.*

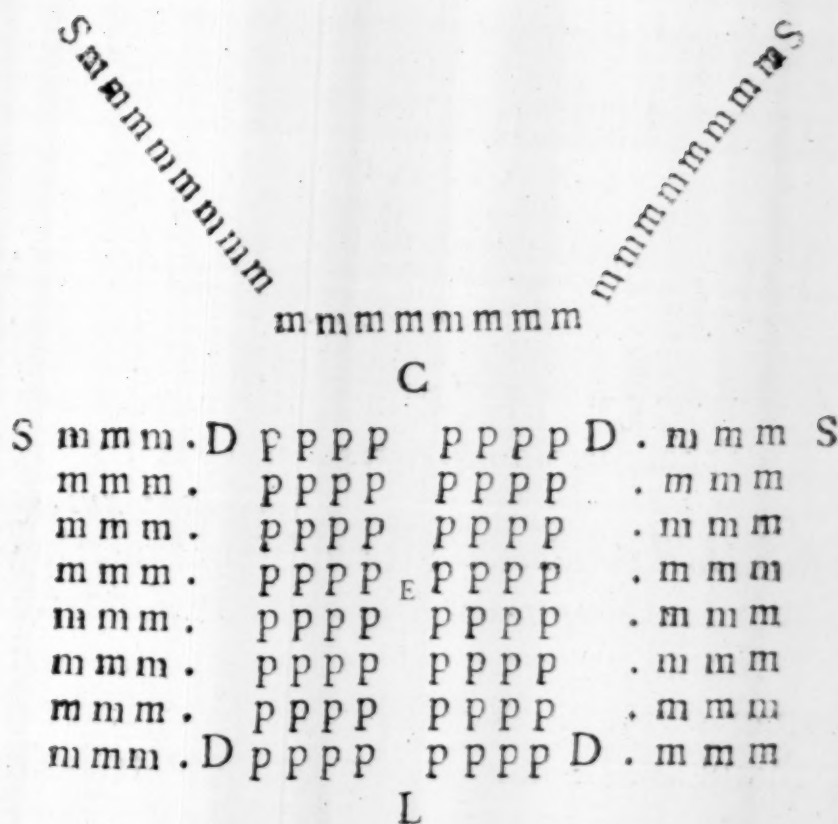
*The first making  
or direction to  
the figure.*

WHEN I began to treat of *formes* and *figures* of *Battell*, I noted all *firings* to be either *oblique* or *direct*; and now for satisfaction to the curious, I shall insert two or three *oblique formes* amongst the rest. The first whereof, shall be a *Firing* to the *front* by drawing forth the *outermost file* on each *flanke*, *obliquely* (or the *innermost*, as shall seeme best to the *Commander*) untill the *bringers up* of the *files*, stand even with the *right* and *left angle-men*, over the *front* of *pikes*. They may also lead a *file*, of *Muskettiers*, *cross* the *front* of *pikes*; when having placed and *faced* them (as they ought



ought) for *execution*, they will *stand* in manner of this following figure.

Front.



The two files of *Muskettiers* which were led forth, having *obliquely* presented *inwards*, and the file drawn crosse the front of pikes, being presented direct *Rankewise*: upon the first *command*, they are all to give fire together, and then to face after their bringers up; who lead their files directly into their places. This done, they face to their proper front againe; the other files (in the meane time) leading forth after the same manner. These having done their *execution*, are to returne into their places:

*The way to give fire obliquely demonstrated.*

being *led off* by their bringers up (as is aforesaid.) The rest of the *files*, after the same manner, *firing* and *returning* untill they have all *given fire*; and then they will be all *reduced*, as at first.



### CHAP. XCVII.

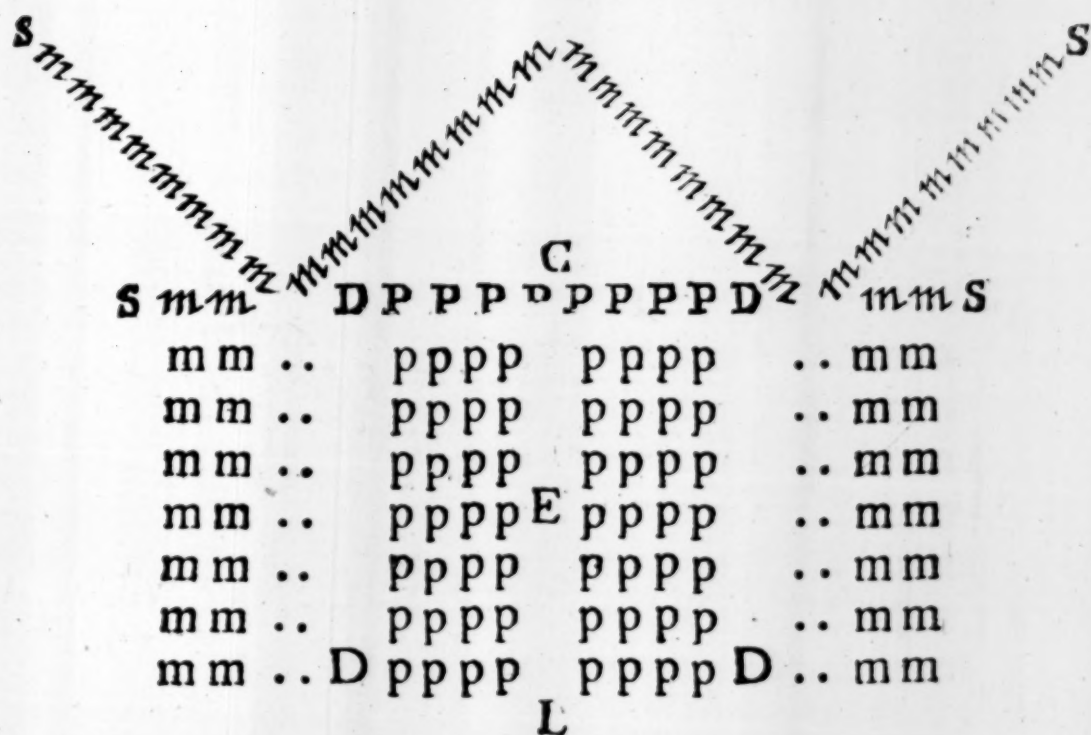
*A firing oblique, by foure files together, in forme of a W.*

*The direction to make the figure.*

**A**Ll the commendations, that may be given of these *oblique Figures*, is, that they *powre out a great deale of shot at once*; and *may quickly be reduced to their places*. Notwithstanding, they are a great *weakning* to the *body*, if any sudden accident should happen before they are settled in their former *stations*. Neverthelesse I shall leave them to themselves; and if they be found to hold out weight, I shall not grudge that I have given them roome amongst the rest. But if they prove too light, let them be as lightly respected, yet beare somewhat with them, for their *antiquity*. The way to make the *figure*, is as followeth. The *two innermost files* of *Muskettiers* on each *flank*, *march forth* (each of them being *led* by an *Officer*) untill they have taken their *places*. Then the *Officers* that *led* forth the *two middlemost files*, are to return to their *places* againe; the *Serjeants* that *led* forth the *outermost files*, standing to see them do their

execution. Yet before the *Muskettiers* have order to give fire, observing the manner of their standing, by the following Figure.

The W. oblique.



The *Muskettiers* having presented according to their directions ; they give fire all together ; and then suddenly facing after their *bringers up*; march downe into their places ; the next two files of each flank in the interim of their marching away, are to move forwards to their ground : where they are in like manner to give fire : and then to take their places as aforesaid. The rest of the files of *Muskettiers* (if you have more) must then move forwards and doe the like. And in this sort, may the *Muskettiers* give fire, once, twice, or oftner over: each firing being a *reducement* to it selfe.

The direction to give fire from this Figure.





## CHAP. XCVIII.

*Of the Fort-Battell; the way to make, and to reduce it.*

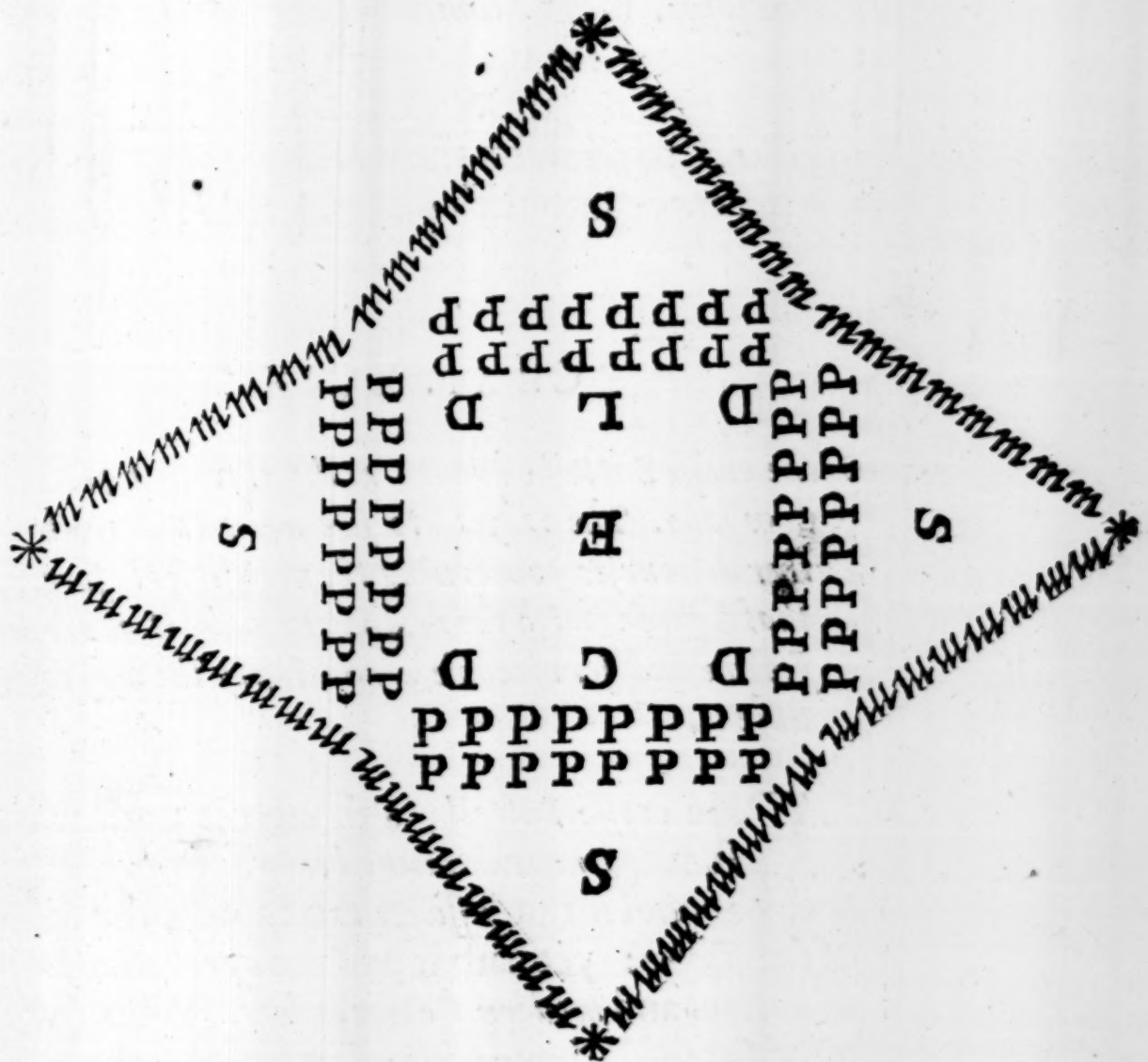
*The use of the  
fort battell.*

*The direction to  
make this figure*

**T**He figure of the fort-Battell, is an *oblique firing*: and taketh its *denomination* rather from the *similitude*, then the *strength* of a Fort. Its chiefe use, is for the *entertainment* of some great personage or commander in the field: who being received into the *midst* of the *division* of *Pikes* the *Muskettiers* may present and give fire altogether in one *vollie*. Or if they would have the *Muskettiers* give fire, one after another; then the *vollies* by *succession* (which some call the *peale*) will be the best. If there be more *Muskettiers*, then will serve to make up the *figure* single; they may also give fire with the rest: presenting *obliquely* between the *distance* of their *leaders*. The way to make this figure, is as foloweth. First, draw forth the *outmost files* (of *Muskettiers*) on each *flanke*, in forme of an *hollow wedge*, before the front of *pikes*. Then, cause the *next two outmost files* to face about; and to follow their *bringers up*, in the same forme to the *reere*. Then, let the *last two files* of *Muskettiers* (on each *flanke*) be drawn after their *file-leaders*, in the same manner and forme, to the *flanks*. The *Muskettiers* being thus ordered, and all presented *obliquely outwards*, command the *two first*, and *two last ranks* of *Pikes*, to *stand*; the rest of the *pikes*, to face to the right

right and left: and so to march untill they are cleere off the other pikes which stand. Then, command the pikes which moved, to double their files to the right. Lastly, command all the Pike-men to face outward; each division of pikes, after their hollow wedge of Muskettiers. Or else, let them face all inward to the Center: and then the Body will stand in forme of the following figure.

The fort-battell



Having

*These firings are to be performed standing the Muskettiers having given fire are to make ready againe, in their places maintaining their figure.*

*Reducement.*

Having *fired* upon this *figure*, there is no manner of *wheeling off*: because the *forme* is still to be continued. But when you come to *reducement*, first *face* all the *pikes* to their *proper front*, (that is, unto the *place* where you find the *proper file-leaders*. Secondly, let the *pikes* which are *flankers*, double their *ranks* to the *left*: and so *close* their *divisions*. Then the *pikes* will be *reduced*. For the *Muskettiers*; first *command* those that are on the *flank* to *lead up* their *files* in their *due places*, close to the *pikes*. Next, *command* the *Muskettiers* of the *reere* to *sleeve up* on each *flanke* by *division*. Lastly, *command* the *Muskettiers* before the *front* of *pikes*, to *face* after their *bringers up*, and to *march downe* into their *places*. Lastly, *facing* to their *leader*, they are all *reduced* as at *first*.

## CHAP. XCIX.

*Of the crosse Battell; how to make it with a private Company. The wayes to fire upon it, with other discourses, concerning the necessities inforcing that figure: with the meanes to make it more defensive and serviceable, and lastly the way to reduce it.*

**T**He *crosse Battell*, although it must needs shew *poore* and *thinne*, being here *demonstrated* by a *number* not *sufficient* to expresse the *worth* of the *figure*: yet hath it past the *aprobation*, both of *ancient* and *modern Commanders*. Who (with good *successes*) have often *drawne out*, the *grosse* of



of their *Battels*, into this forme : and therewith both *sustained*, and *recharged* upon their *Enemies*. Each *division* being very *aptly placed* ; to relieve the other. If the *enemy* (be like to) give one in front then the *reere division*, may *sub-divide* and *march up by each flank*, & make the *wings*. But if that part be supplied by the *Cavalry* : then they may serve to *line*, or *mixe*, between the *intervalls*, & *divisions* of the *horse* ; or be *otherwise disposed of*, at the discretion of the *Commander*. Neverthelesse, if any object, that the *enemy* being in open *Campania*, may as well *charge* your *Battels*, in *flanke* or *reere*, as in *front*. The answer may be easily given ; that the *body* being *faced*, the matter doth still continue the same.

Even and open Countries very dangerous for small bodies : where the enemy is superiour in number or horse.

If it be re-objected, that the *enemy* having the *advantage* in *number* : may seeke to *distresse* you ; by *charging on in severall places at once*. To that may likewise be answered that each *division*, may *readily face* to that part and *receive their charge*.

Nothwithstanding, discreet *Commanders* have ever been *cautious*, to *adventure* into the *even*, and *open Country* (when the *enemy* hath the *advantage* of *horse* ; or much the *greater number* of *foot*) whereby they may be forced to the *hazard* of a *battell* : The which without *manifest necessities*, or (to the contrary) some *known* and *extraordinary* advantages : ought neither to be given, or *accepted*. So *nice* and *ticklish* is the *chance* of *war* : where *small errors*, often times, are the *forerunners*, of *great overthrowes*. But my intent is not, to *lanch forth* into these *lavish discourses*, but *timely* to make

The hazard of a Battel perillous.

*make my retrete, unto my privat Company: and without further circumstances, of what hath, or may be done; come to shew, what I intend, concerning this figure: and shew the wayes, to fire upon it; the which are ordinarily two &c.*

*The first placing of the Muskets.*

The first, when the *Muskettiers* give fire, and then place themselves in the *reere* of their *own divisions* of *Muskets*. \* The second way is, after that they have fired, to place them in the *reere* of their *Pikes*: the *Pikes* maintaining the *Muskettiers* ground. The words of Command which produce the Figure, are as followeth.

*The second way of placing the Muskets.*

*Two first rankes, wheele your front into the midst.*

*Two last rankes, wheel your reere into the midst.*

*The direction to make the Crosse Battell with a private company, also you may observe if that the crosse Battel were to be made with a Brigade, or Regiment, then instead of wheeling 2 rankes we should perhaps wheel 2 or 3 Companies, to either part &c.*

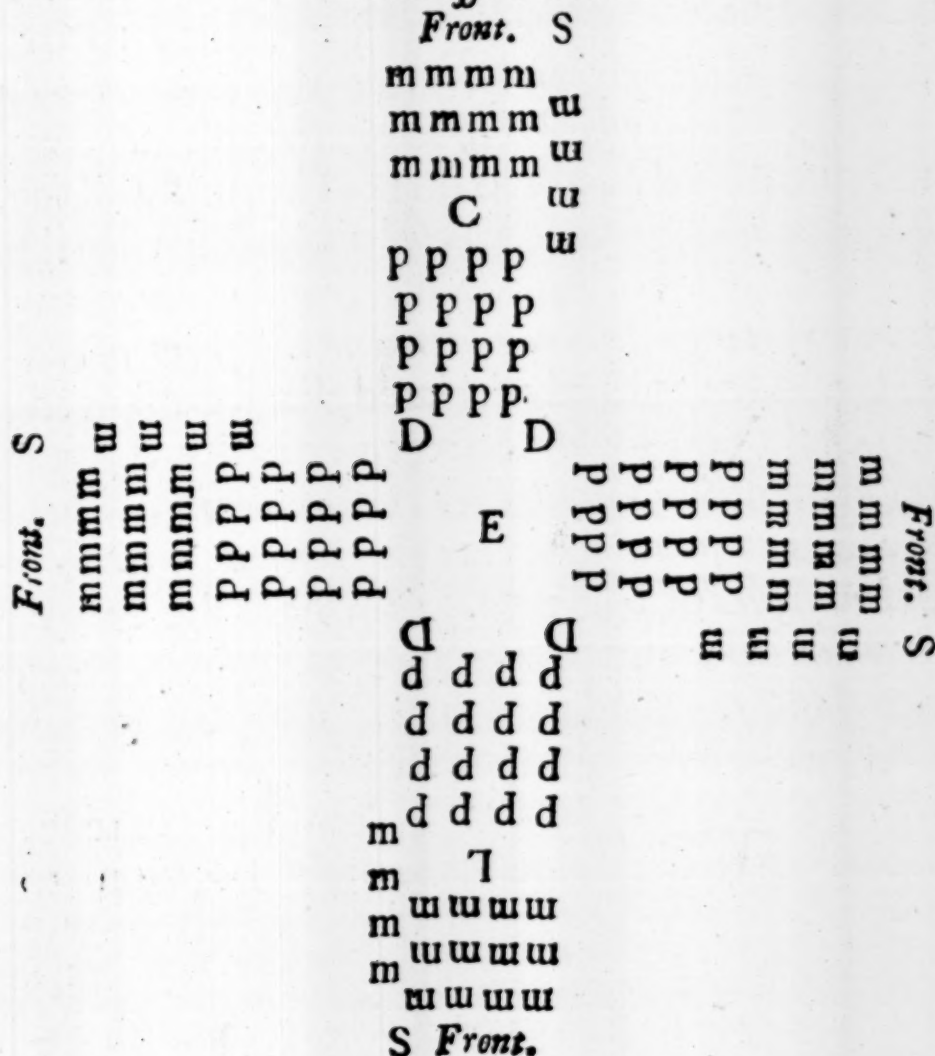
*The rest of the body, face to the right and left: and so march, untill the reere of the fourth division make an even hollow square.*

*Then let the Commander go into the midst, (or center) and face the whole company to him: giving them such direction as is meet.*

*Lastly, being all faced about to the right, the body will stand like the following Figure.*

The

*The Crosse Battell.*



Note that as men stand in ranke when they give fire, so they are to place themselves againe, when they have fired. The outermost men, taking the outside places the rest, in like manner, orderly placing themselves within them.

\* This *crosse Battell* being faced to the front, reere & flanks, and the Muskettiers commanded to give fire: one way of placing them, is, in the reere of their own divisions of Muskettiers; for that hereby, the Muskettiers will still continue their places. For the second way, after that the first ranks have given fire, let them wheele all off to the right (or to the right and left, if the number be large) and place them-

The direction of this firing.



when there is  
not above two  
or three ranks  
of Muskettiers  
to give fire, the  
Pikes may poe  
when all the  
Muskettiers are  
in the Reere of  
the pikes let them  
charge.

It is very dan-  
gerous to fight,  
when our soul-  
diers are dishart-  
ned by some  
known, and evi-  
dent disadvan-  
tage.

Palisadoes used  
by the Persian  
army of Xerxes  
against the Gre-  
eks at the bat-  
telle of Micha-  
ell in Asia about  
1800. yeeres  
since in modern  
service by the  
King of Swede  
against the pole;  
as also in the  
German war

themselves in the reere of their *Pikes*, each *ranke*  
*moving forwards*, and *maintaining* their *leaders*  
*ground*. The second *ranke*, in like manner, is to *fire*,  
and to *take* their *places* after the *Muskettiers*,  
which *fired* and *wheeled off* last before them. The  
rest, successively, are to do the like, untill all the  
shot have *fired*, and are *wheeled* away. Then let the  
*Pikes charge* &c. If any object, that it is *dangerous*,  
to have so large distance betweene the front of each  
*firing*. I have already declared, that it must needs  
be occasioned by some great extremity thrown  
upon us through *negligence*, or *neceessity*, when  
we shall be forced to accept the *Battell* with so e-  
vident *signes* of *disadvantage*: where the *enemy*,  
may *surround* and *charge* upon us, in *front*, *reere*,  
and *flankes*. And therefore seeing that in such  
cases we are not alwayes afforded *meanes*, nor  
*time*, to supply all *defects*: we must be content,  
according to the suddennesse of the occasion to  
make so good *defence*, as for the present we may  
conveniently *provide*. And in such places, which  
lye most open to the *enemy* (where through de-  
fect of *number*, the *danger* must needs be great)  
there to place the *waggon*s, *Carts*, and other car-  
*riages* so commodiously that they may serve for a  
*Rampart*, or *defence* against either *horse* or *foot*.  
Or if it may be found more *convenient*, to *impale*  
those *places* (least *defensible*) with sharp *pallisadoes*;  
the which (hath been a *weapon*, of *ancient use* and  
*now againe lately practised*, by the *Gentlemen* of the  
*Military yard*;) and I conceive may prove very  
*usefull*, to defend the *void*, and *open spaces* which  
want

want other defence, from the *fury and insolence*, of the *haughty and over daring horse*. But if all these *helpes* be *wanting*, then three or foure *files* of each *armes*; may be *drawn crosse*, from the *Angle* of one *front* to the *other*: the which being well *ordered*, may make reasonable good defence on those *parts*.

Having *given fire* upon the *crosse-battell*, and brought your *Muskets* to the *reere* of the *Pikes*. \* if you would *reduce* them, *pass*e into the *midst* or *Center* of the figure, and *face* all (both *Muskettiers* and *Pikemen*) to you; and cause those which were the *flankers*, to *close their divisions*. Next *whee*le the *fronts* into the *midst* of the two other *divisions*: then move the *front proper*, and *face* the *whol body* to you, and so you shall have all your *Muskettiers* in the *midst* *flanked* with *Pikes*. If you would *reduce* them into their right places, command the *Muskettiers* to *face* to the *right & left outward*, the *Pikes* to *face* to the *right and left inward*: and so to *pass*e through, and *interchange ground*: this being rightly performed, and the body *refaced* to their *Leader*; they are reduced.

The reduce-  
ment.



## CHAP. C.

*Of the hollow-fronted Crosse battell, how to make it  
with a privat Company: and the  
way to fire upon it, &c.*

*Such, and so  
great Lovers of  
Armes, as Phi-  
lophenen the A-  
chaian. Raw-  
ligh. hist: man-  
dr. Cap. 5. of  
the 5. booke of  
the first part.*

**T**His next *Figure* shall be of the *hollow-fronted Crosse*; which is a *stronger forme* then that last shewne; and yet thus much let me warne you of, that there can be but little expectation of *strenght* to be perceived, in *battels* formed with so small a *number*. This notwithstanding, the ingenious *Martialists*, can *easily discern*, those things which in warre may prove most usefull for their owne and their Countries benefit; although they are here expressed to the publick view, in so *meane array*, and in such *thin numbers*. Wherefore, setting aside all Apologies and excuses, I will briefly shew the words of *Command* and *Direction*, which will produce the following *figure*.

*The direction to  
make the hollow  
fronted Crosse,  
the files contain-  
ing 8 men in  
depth.*

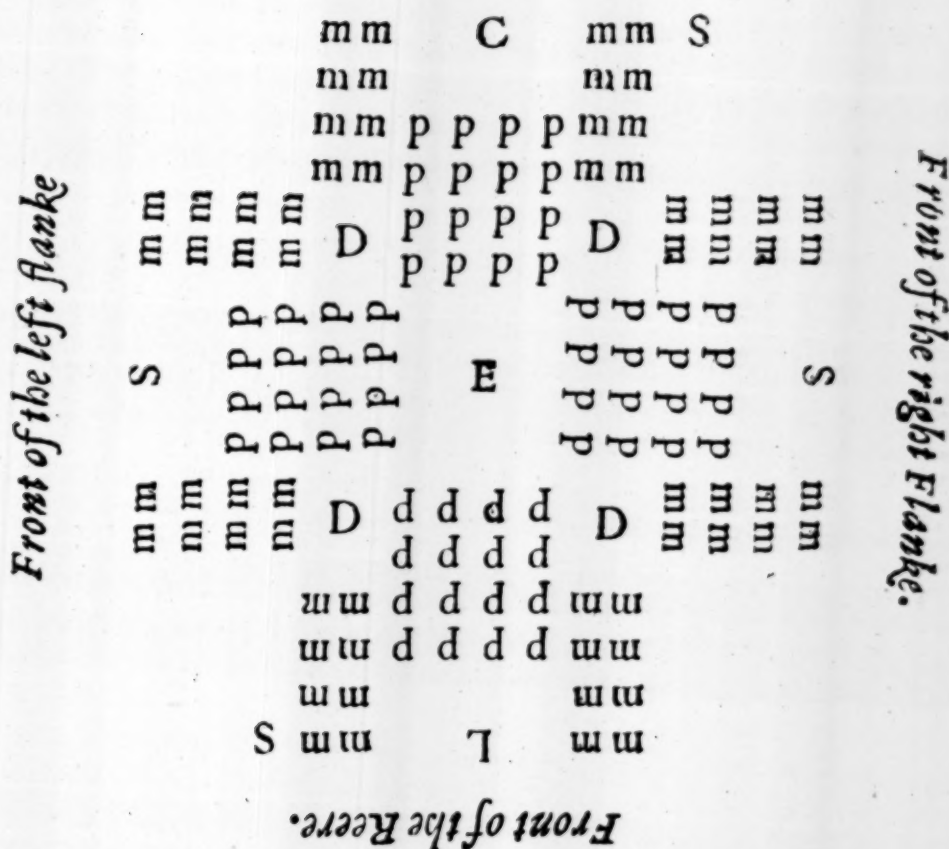
*Two first rankes, wheele your front into the midst.  
Two last rankes, wheele your reere into the midst.  
The rest, face to the right and left: and march  
untill they have made the perfect Crosse.*

*Lastly, cause the Muskettiers to flanke their pikes:  
according to this following figure.*



The hollow fronted Crosse

Front proper.



The severall *directions* for *firing* upon this *figure*, may be divers. But to avoid *distraction*, I will shew only one way; and that *directed* to the *front*, *reere*, and *flanks*. Neverthelesse (for varieties sake) you may cause them to *give fire* once over, *wheeling off* by *division*, and placing themselves in the *reere* of their owne *divisions*; still *moving forwards* into their *leaders ground* thereby to preserve the *figure* in the same *order*.

At the second time of *firing*, cause the *pikes* to

to move *softly up*, even with the front of *Muskettiers*: *porting* as they *advance forwards*. The *Muskettiers* having *fired*, and *wheeled off*, are to place themselves in the *reere* of their *divisions* of *pikes*, (whom before they *flanked*) every *ranke* of *Muskettiers* *firing*, *wheeling off*, and *placing* themselves as *aforesaid*. Lastly, the *pikes* having *charged*, and againe *readvanced*, the *body* will stand in the *figure* of a perfect *Crosse*.

The *reducement*  
is the same with  
the *crosse battell*.

For the *reducement*, it is the same with the *Crosse-battell*, delivered in the last chapter. Wherefore I shall need to adde no further *directions* in this place, for the said *reducement*, then, that the *flank-divisions* are to be closed, and the *front* and *reere-divisions* to be *wheeled*: that the *body* may be againe returned into a *square*, with the *Muskettiers* in the *middle*. All this being here taught, I now proceed to shew one *firing* with the *Muskettiers* in the *midst*.



## CHAP. CI.

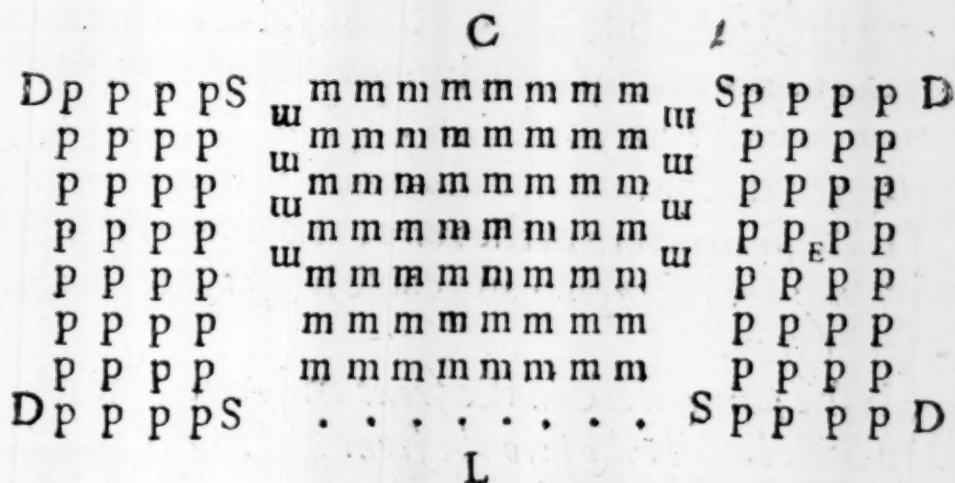
*Of firing upon the Square Battell, flanked with Pikes.*

**T**He *square battell flanked with pikes*, must needs be very safe for the *Muskettiers*, as being a very able *defence* for the *flanks*, against the *incursions* of the *enemies horse*. The *Figure* followeth demonstrating the *Muskettiers* in *motion*.

The

The Square Battell flanked with Pikes.

Front.



The wayes in ordinary exercise of giving fire upon this figure are ordinarily three. The first firing is, with the aspect being directed to the front; the muskettiers wheeling, either all off to the right; or to the right and left, as you perceive by this figure. The second is, for the muskettiers to give fire to the reere, upon a march; which they may easily doe, from this figure. The third is, to give fire to the front and reere, upon a stand; the halfe-files being faced about.

The severall wayes of firing from this square figure.

If the firing be performed to the front then every ranke is to march up into their leaders ground.

Note the firing to the front.

If the firing be to the Reere, upon a march, then the ranks (contrariwise) close backwards towards the Reere: to make good the battell, on that part.

The firing to the reere.

If it be to the front and reere, upon a stand; then the muskettiers march up into their leaders ground;

The firing to the front and reere.



and those which have *fired*, and are *wheeled* off, place themselves in the *reere* of their owne *divisions*.

To write further of this *firing*, were more then necessary, no one of these *firings* any wayes altering the *figure*, but the *Aspect* only. Neverthelesse if the *Commander* please, he may after the *firing* in *front*, *wheele both flanks into the front* and so *charge pikes*; and from thence proceed to other *firings*.

If the *firing* were in the *reere*, he may *wheele the flanks into the reere*; and cause his *pikes* to *charge* that way.

These two wheellings are to be understood for single companies and not for larger bodies.

If the *firing* were to the *front* and *reere*, he may *wheele both flanks into the front and reere*; and so *charge* with his *pikes* both wayes. Which by *Captaine Bingham* is called *Amphistomus*.

Before I come to *reducement*, I shall proceed to the next *firing* in the ensuing *Chapter*.





## CHAP. CII.

Of the ancient manner of Imbattelling the Plinthium: the placing of each armes, and the use of the Figure.

THE Plinthium, anciently used amongst the Grecians: was an even, foure sided (or foure fronted) battell. The middle part thereof, being commonly hollow: on the outsides, alwayes marched the heavy armed, the light and nimble armed slingers, darters, and archers being more securely placed in the midst.

Notwithstanding it tooke denomination from the forme, and not from the placing of the armyes. Eudamus. (for example) Eumenes having sent for his Elephantes, to their wintering stations: Antigonus, thought to take them by surprise, And to that purpose sent 2300. speare-men and Tarrentines; with all his light armed foot: who overtaking them upon the way &c. The Commanders of the Elephants, ordered the Beasts into the plinthium: casting all their Carriage into the midst. And indeed it was a figure, commonly taken up in times of necessity, when the adverse part, was much the abler in horse. And to that purpose, was it framed by Tymotheus, the Athenian Brisdas the Lacedemonian, Bardillis, the Illirian, and many others. Being usefull, and necessary, as well in time of Battell, as in march, at both times for the security of the Carriage, and the defence of the sicke and

The Elephants were ordered in to a hollow square, by Eudamus their Commander.

Sir Walter Rawlins-Hist: mundi. lib: 4. Cap: 4. sect. 4. as also in.

The Tactics of Eitan lib: 2. the notes of the 42 Chap.

Plinthium is a  
hollow four-  
fronted Battell,  
having acute  
Angles.

wounded. Much like unto this is our *hollow four-fronted Battell*: which may well retain the same name, although sometimes differing in the placing of our *armies*. For if it should so happen (as it often doth) that a charge be given in *front*, *reere*, and *flanks* at one and the same time: then I conceive this ensuing *Figure*, very apt for *defence*, for that the *Muskettiers*, and *pikes* are so placed that each *armes* may be ayding and assisting to the other. For seeing that neither *muskettiers* nor *pikemen* alone, can be singly sufficient of themselves, to withstand the able and resolute *horseman* (without great *advantage* of *ground*) on the contrary, the *muskettiers* and *pikes* being *conjoyned* into one *body*; and being well *ordered*, they are not only able to *defend* themselves against their *fury*, but also to put them to the *worst*. Yet this must not be understood, of *raw* and *unskilfull* *Souldiers*, whose ignorance is cause of diffidence; but of *hardy*, *experienced*, and well *exercised* men, such as know well how to demean themselves *courageously* in time of *Fight*.

Note that all the Muskettiers must be in the midst, and the Pikes on flanks when you begin to make this figure. If your Muskettiers be on the flanks when you make it, then the Crosse will be Pikes, and the Angles Muskettiers, &c.

The words of *Command* and direction, which produce the figure, are as followeth.

*Halfe-files of pikes, face to the reere, and march untill they are cleere of the last ranke of muskettiers.*

Secondly, command,

*Halfe-files of muskettiers, face to the right and left, (then) march betweene the divisions of pikes.*

Thirdly, command,

*Left halfe-ranks, of the first division of muskets, face to the reere, and march between the Reere divisions of pikes.*

Lastly

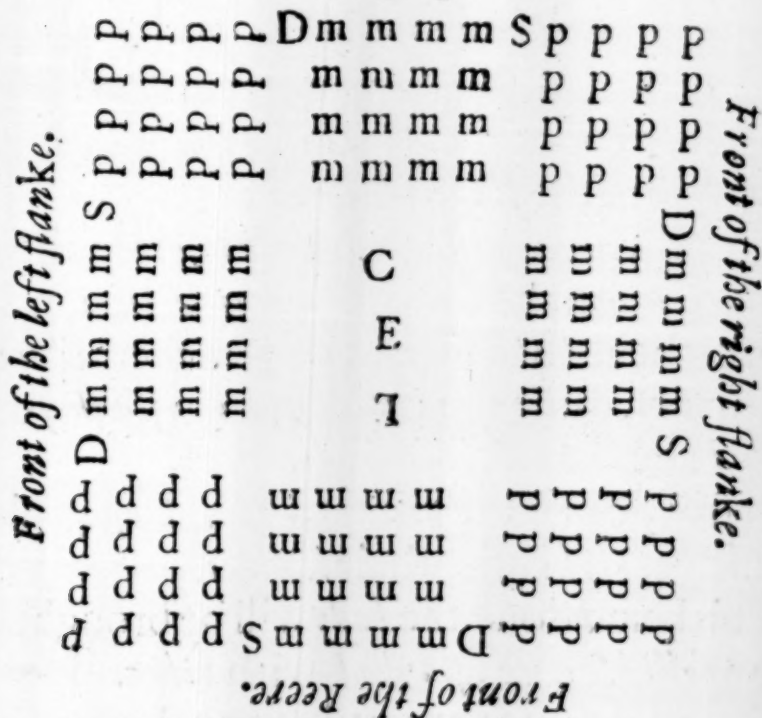


Lastly,

Having *evened* their *ranks*, *straitned* their *files*, and *closed* their *divisions* to an *equall distance*, and being rightly *faced*; the *body* will *stand* like the following *figure*.

The *Plinthium*, or *four* *fronted Battell*.

*Front proper.*



The *Plinthium* is a hollow square Battell, fronted four wayes the number equall, in length & depth. Another kind of *Plinthium* is to have the depth exceed the length; the light arms to be placed in the midst of the hollow part. See the *Tactick* of *Ælian*, the second Booke, the notes of the forty two Chapter.

The manner of the *firing*, may easily be apprehended by the *figure*; the *muskettiers* giving *fire* in *rank*, and *wheeling* all off to the *right*, doe then passe downe their *Intervals*, under the *favour* of their *pikes*; placing themselves in the *reere* of their *owne divisions* of *muskettiers*; the *pikes* charging at discretion. Having *fired once*, *twice*, or oftner over, and still maintaining the same ground, the *Figure* will continue to be the same.

If

If the *reere* part of the *battell* was by any means secured; so that you need *give fire* but *three wayes*, then the *front-half-files* of *muskettiers* might have been preserved *intire*.

This *Plinthium*, or *foure-fronted Battell*, may as well be made with the *muskettiers* in the *Angles*: the *pikes* making the *Crosse*; this kind of *Command* alwayes making the *crosse*, of the *Arms* in the *middest* of the *Battell*.

The reducement  
of the *Plinthi-  
um* into the *sol-  
lid square*, flank-  
ed with *pikes*.

After that you have *given fire* at discretion, up-  
on this *figure*, and *charged* your *pikes*, if you would  
*reduce* them to the first *square*, *command* the whol  
*body* to *face* to the *front proper*.

Secondly, *command* the *muskettiers* in the *reere*  
to *march up* on the *left* of the *muskettiers* in *front*:  
the *pikes* being first *opened*, to give them *place*.

Thirdly, cause the *muskettiers* in *flank*, to *face*  
*inward*: and to *close* their *divisions*.

Lastly, cause the *pikes* to *march up*; placing  
themselves *right after* their *leaders*.

The perfect re-  
ducement.

This being done, the *body* will be brought again  
into a *solid square*, *flanked* with *pikes*. I forbear  
further to *reduce* them until I shew the next *figure*.  
Yet, for further satisfaction to any that shall re-  
quire it: *command* your *muskettiers* to *face* to the  
*right* and *left outward*; the *pikes*, to *face inward*;  
and so to *interchange ground*; and then being  
rightly *faced*, they are *reduced*.



## CHAP. CIII.

*Another hollow square for March.*

Sundry formes there be which go under the denomination of the *hollow square*, and very diversly they may be framed. Some are *hollow*, *impalled* with *pikes*; the *pikes*, againe, *girdled* with *shot*: Other *squares*, are made with *shot*, and they *impalled* with *pikes*. Some againe with *divisions* of *muskettiers* and *pikes*: orderly *wixt* with an *hollow* in the midst. A fourth sort, is when each *Armes* are *divided* by themselves: as when the *pikes* make the *front* and *reere*, and the *Muskettiers* the *wings*. A fifth way is, when the *Muskettiers* leade in *front* and *reere*, and the *pikes* make both the *flanks*. All these wayes are very necessary and usefull; as the time, *occasion*, or place shall give cause; or the judgement of the *Commander* shall see fitting. Neverthelesse, the *hollow battell* which I now intend to demonstrate unto you, is especially usefull for a *march*: whereby to secure the *carriage*, as likewise to preserve the sicke and wounded it may also serve for the *Commander* to consult with his officers or to make any *speech* or *Oration*, to the souldiers. Or the Ensigne may in signe of *triumph*, display his *Colours* in the *midst*: upon a *march* after *skirmish*.

*As it now is the  
Custome after  
exercise.*

The way to make this figure (the *Muskettiers* being in the *midst*) is as followeth. First command the  
Halfe-

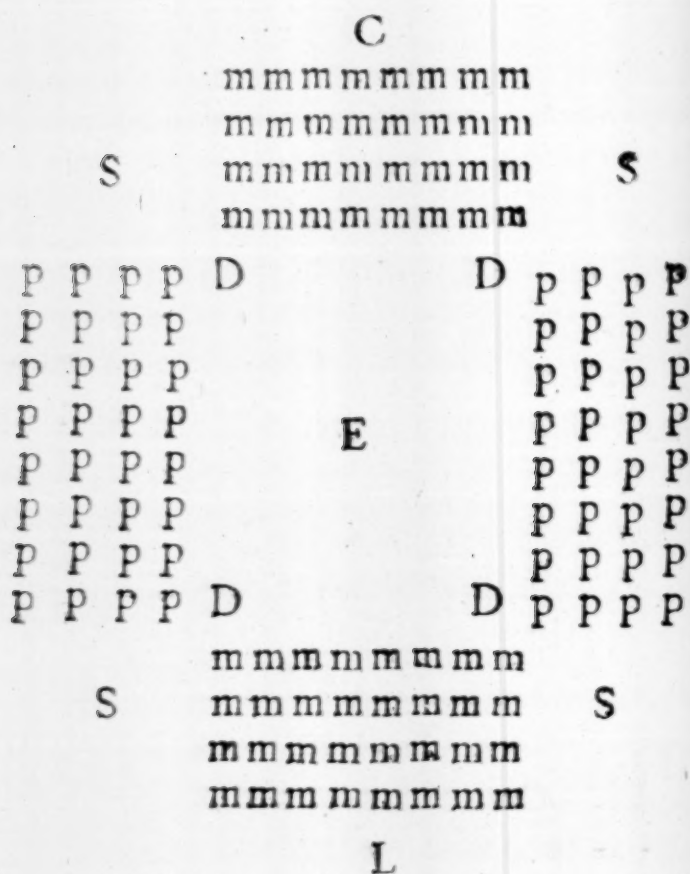


*Half files of Muskettiers, to face to the reere :*

Then Command all the

*Muskettiers to march, and the pikes to stand.*

When they are cleare of the front and reere of the Pikes, let them stand, and face all to the front proper: and it produce th this following figure.



The direction to  
this firing.

If the firing be only intended to the front: then command the Muskettiers of the Reer-division, to open to the Right and Left, and to sleeve up on the outside of the pikes, there presenting and firing at the same instant, with the Muskettiers of the Van: each part wheeling off, and placing themselves in the reere of their owne divisions. This firing doth conceive

conceive the *reere* to be by some meanes *secured*. But if you presuppose a *charge* to be given to the *front*, and *reere* marching. It may be *retaliated* (or acquitted) still continuing the *march*. Nevertheless the insolence of the *Enemy* will scarce be repelled, or abated; without an *alt* and *facing about* of the *Reere-halfe-files*. The which being performed the *Muskettiers* are to *present* and *give fire*; *wheeling off by division*, and *placing* themselves in the *reere* of their owne *divisions* of *muskettiers*; each *rank* *moving forward* into their *leaders ground* and doing the like. If you should *give fire*, and not *move forwards* into your *leaders ground*: then the *muskettiers* would *fill the hollow* in the *middest*, betweene the *pikes*. Nevertheless, suppose the *figure* still to continue to be the same. Because I will now come to the *reducement*: and the rather, for that I have not done it since I began with the *Hollow-fronted Crosse*. But now (so please you) I will *reduce* all by a *firing*. And to that end, first *close* your *divisions* of *pikes*; and then the *muskettiers* will be all in the *front* and *reere*.

The *reducement* by a *firing*, the which is not expressed in *figure* in this place: it is in *Cap: 88*.

Secondly, cause the *halfe-files* (both *muskettiers* and *pikes*) to *face* to the *Reere*. Then cause the *muskettiers* (both of *front* and *reere*) to *give fire*, *wheeling off by division*, and *flanking* their *pikes*. When they have *fired* al over, the *pikes* may *charge*: who being againe *advanced*, and all *faced* to the *front* proper, they are all *reduced* (as at first) into the *ordinary Square*, *flanked with muskets*.



## CHAP. XCI.

*Of the hearse Battell, and of the hollow hearse, and Crosse.*

*Tactikes Cap :  
30.*

*The use of the  
hearse.*

*If it were not  
for these impe-  
diments: it were  
better to march  
in forme of Bat-  
tell; with the  
front and wings  
extended at  
length.*

*The hearse bat-  
tell of all other  
the weakest for  
fight.*

**T**HE hearse battell, by the Greeks called *Orthophalanx* (as in *Elia*) Is when the depth, doth manifold exceed the length, thrice at the least. As when our Companies march forth by right inductions (or in successive divisions) It is a figure especially usefull for marches, because that upon those occasions, a body drawne out in length would meet with many lets and impediments: by reason of the variety of grounds, and other accidents the which they must comply withall in their way. Sometimes incountring with woods, and bushes, sometimes with hills, and straights, sometimes with rivers, bridges, ditches, pits, quackmires, and many other the like inconveniences: which would quite breake the order, and array, of any other figure, having the length more extended. This forme is also held the best for march in the night; because the range (or breast) not being long, the order may be the better preserved and the march perfor-



performed with more silence. But of all other, it is the *weakest*, bringing but few hands to fight: and hath seldom or never been *used*, by any good *commander*, unlesse it were upon necessity. It may be made either *solid* or *hollow* and being conjoyned to the *cross*, may prove more *serviceable* (especially for the security of the *carriage*).

True it is, that were the *forme* far more *strong*, yet being demonstrated, by so small a *number*, might well *render* it suspected: seeing the worth thereof (by reason of the *thinnes*) could not so evidently *apeare* as otherwise it would, were the *number* larger.

But I have only taken upon me to shew the *severall formes* and *Figures* of *Battell*, which may be *formed* and *practised* by a *privat Company*: as having *limited* my selfe, not to *exceed* the number of 128 men. Wherefore my request must be, that the *courteous Reader* when he shall find that any *figure* for want of *number*, looks *thinne*, (or *poore*) he will there be pleased to *clothe* it in a larger *number*: for that thereby the *Battell* will *apeare* the more *solid*, and the *beholder* become the better *satisfied*.

This *figure* may in like manner be *usefull* for a *Convoy*: the *hollow parts* thereof, being very *commodious* to *secure* the *carriage*: the men also are very well *disposed* to *helpe* and *assist* each other, in whatsoever part it should happen them to be *assailed*.

This figure fit  
for a Convoy.

The direction to  
make this figure  
with a private  
Company.

The words of *Command* and *Direction* which produce the *figure*, are as follow.

wkeele

*Wheeled front and reere into the left flanke.*

That done, *face* them as before, and the *muskettiers* will be in *front*, *midst*, and *reere*.

Next, *open* the *muskettiers* in the *midst*, to the *right* and *left*, and cause them to *double* their *ranks* to the *left*.

Then cause the *front-halfe-files* of the *front division* of *pikes*, to *open* to the *right* and *left*: and the *reere-halfe-files* of the *reere-division* of *pikes* to doe the like.

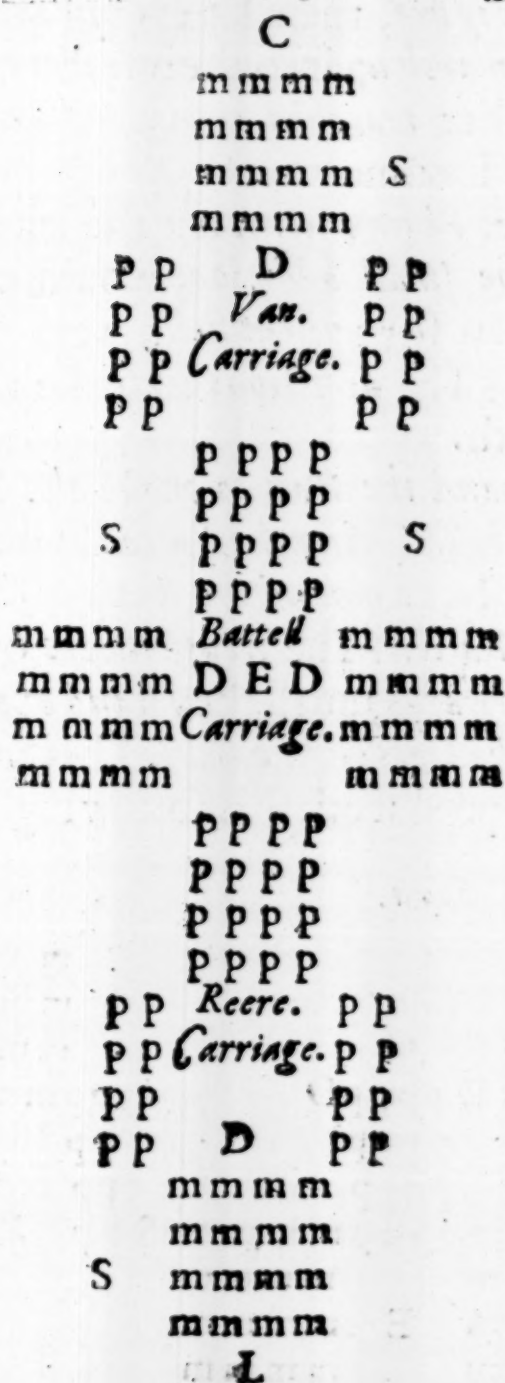
Then, having *evened* their *rankes*; and *straightened* their *files*, and being *faced* to their *leader*, the *body* will stand in *forme*, like this figure.

---

The

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The hollow Hearse and Crosse.



a If so be, you will give fire upon this Figure, a The direction  
you may do it any way, or every way. If you give fire on to this figure  
to the front, reere, and flankes; then let your Muskettiers  
wheele all off to the right, and place themselves



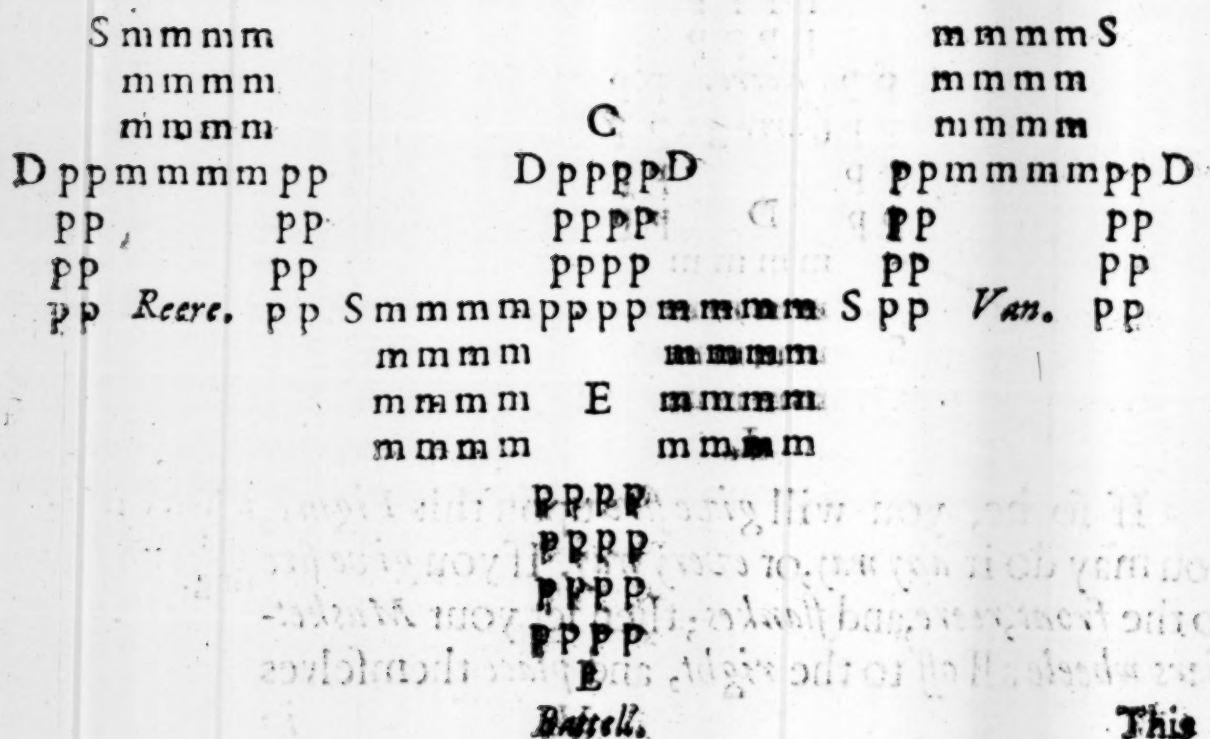
in the *reere* of their *own* divisions. If you would still preserve the *Figure*, then let every *ranke* (before they give fire) march up into their leaders ground.

Having either *marched* or *skirmished*, in this *forme*; before I come to the *Reducement*, I will draw one other *Figure* from it: the which I conceive with some small addition, would prove very serviceable, even for a pitch field, were the number proportionable. <sup>b</sup> The directions to make this *Figure* are as followeth.

<sup>b</sup> The direction to make the ensuing Figure.

First, command the *Van* to make *alt*. Secondly, command the *crossie* (being the *Battell*) to *sleeve* up on the *Left*. Thirdly, command the *Reere* to *sleeve* up, to the *Left* of the *Battell*. The *Muskettiers* of the *Reer*, still moving forwards, untill they stand even Ranked, with the *Muskettiers* of the *Van*. This being rightly performed, produceth this following Figure.

Front,



This Figure although here demonstrated by the number of a single Company: yet carrieth the port of a Regiment. Borrowing the denominations of Van, Battell, and Reere: and may at the direction of the Captaine (or other Commander) be so ordered; and the firing performed accordingly. The Van, and Reere, making the Wings, may send forth a loose files, to begin the Skirmish. Secondly, they may give fire even a breast. Thirdly, the Battell, slowly advancing, may give fire at discretion. Upon all these firings, the Muskettiers, are to wheele off to the right, or to the Right and Left; taking their places, according as direction shall be given. Lastly, to come to the Reducement. First, march forth the Van: the Battell, and the Reere, falling successively into their places. Secondly, command the Pikes of the Van and Reere, to face inwards, and close their divisions. This being performed, cause the Muskettiers of the Battell, to double the files to their right, and in like manner to face and close their divisions. Lastly, wheele Front and Reere into the right Flank: which being done, and the whole body again faced, to the Front proper; all will be reduced as at the first.

c This Figure especially proper to a Regiment.

d Note in Chap. 73. the directions of firings by forlorne files.

e The loose disbanded files, being returned, the wings begin to give fire even abreast. f The reducement.

g Making againe, the hollow herse and crosse.

## CHAP. CV.

*Of the Hollow Square, girdled with shot.*

**T**HE *Hollow Square, girdled with shot*, is a figure to be used in times of necessity, when as the Commander well foreseeing he shall be enforced to fight (with great disproportion of number) he therefore wisely and timely takes the benefit of some <sup>h</sup> *advantageous ground*: thereon speedily drawing forth, and *imbateling his Army into this forme*. And that nothing may be wanting, or through neglect exposed to danger, the which by any meanes may bee secured; all the carriage (which otherwise would not prove serviceable, and *availeable* for the better strengthening, and fortifying some part or other of the Battell) should be safely placed in the *midst*. And least the adverse part taking advantage to break in at any the spaces between the *Angles*, should thereby breed confusion, or *break their aray*; they are suddenly to impale those parts which offer themselves as *weakest* (and least *defensible*) with *sharp-pointed pallisadoes*.<sup>i</sup> The which weapon, hath sometimes been used by our *English Bowmen*, with good *successe* against the *French*: and now of late in our own time, by that worthy *Hero, and Prince of matchlesse memory, Gustavus Adolphus, King of Sweden, in his warres of Pole, and Germany, joyning the Swines-feather with the Musket, as a reasonable defence against the incursions of the Horse*. The use of which weapon is now practised

<sup>h</sup> Vneven, rough, bushie and hilly grounds, are all lets and impediments to the horse.

<sup>i</sup> At Agincourt.

Pallisadoes have likewise been used of late in the Eastern wars by the name of Swines-feathers.



taught and taught here amongst us : by that worthy Gentleman and expert Souldier, Captaine Henry Tillier.

But to return : those parts which lye most open to the fury of the enemies Horse, ought to be impaled with pallisadoes (or swines-feathers) as aforesaid : or if those kinde of weapons be wanting, then supply that defect, by speedy casting up a rampart or breast-work of earth, in each needfull place. Neverthelesse if time permit not, or that the ground be not feasible, then the Wagons, Carts, and other Carriages, may be so orderly placed, that of themselves they may be sufficient, to fortifie and defend those places, which otherwise would lye to open to the invasion of the Cavalrie.

This Figure, may be as well made with the Pikes foremost : but because that the Muskettiers may more commodiously fight before their Pikes, and with lesse danger to their own body : therefore I conceive it fittest, at first to place them in front of their Pikes. And if the enemy shall too hotly presse them with his Horse ; then, at the discretion of the Commander, they may safely retreat behinde their Pikes ; the Pikemen making good the ground of the Muskettiers. For better satisfaction, observe the direction to make the following Figure. First, command a Sergeant to draw forth all the odd files of the right flank, (both Muskettiers and Pikes) and the odd files on the right flank ; are the outermost file to the right ; the third file, the fifth file, the seventh, and so forward for the rest, if the Body be larger beginning your account from the outermost file, to the right. Note, that the odd files on the left flank, are the left hand file : the third, the fifth, the seventh, &c. so still accounting the odd files, beginning with the outermost file to the left.

These directions are for a private Company: a Regiment or larger body must be otherwise ordered.

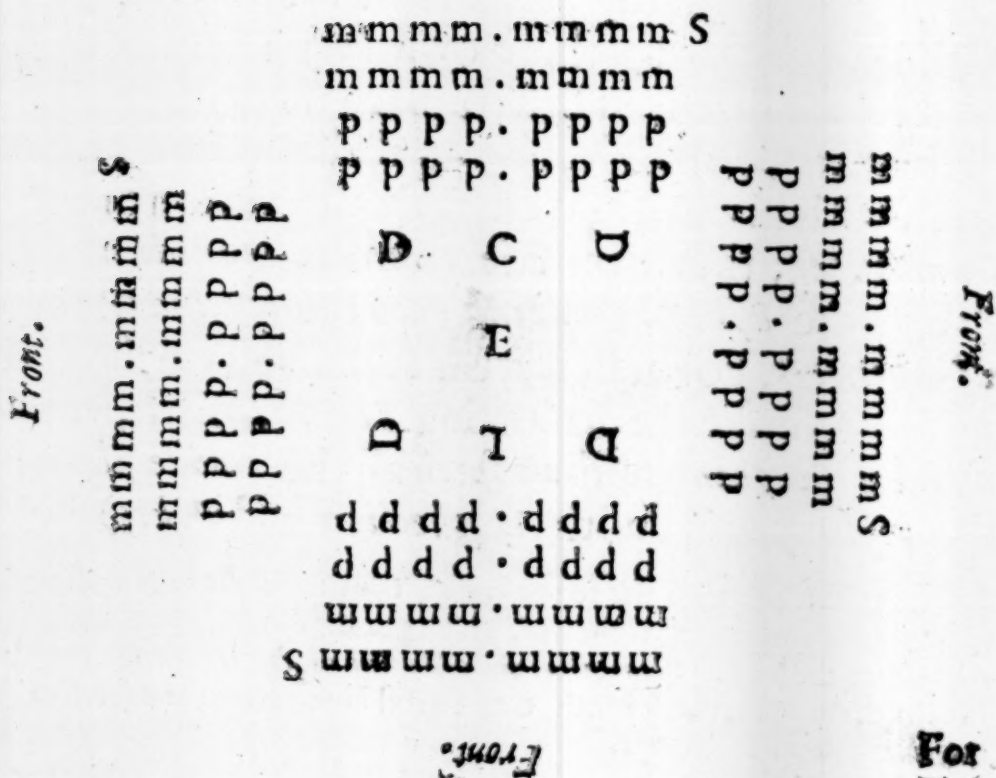
wheele them to the left, crosse the front. That being done, command the odde files of the left flank, (as well Muskettiers as Pikes) to face to the reere, and let them in like manner be wheeled to the left, crosse the reere, following their Bringers up.

For the rest of the body, that remains undrawne forth: let them close to the right and left outward; untill the Reere-Angles of each division, stand diagonally opposite to each other. Then, let them be all commanded to face to the Center or midst of the hollow square; where the Commander is to give them such incouragement and directions, as shall be meet.

Lastly, let all face about to the right, and present.

*The hollow square Girdled with Shot.*

Front.



<sup>l</sup> For the manner of *firing* upon this *Figure*, it is as followeth. The first rank of *Muskettiers* (to each front) having presented and given fire, they are to <sup>l The direction to the firing.</sup> *wheele* all off to the right. And because that eight or tenne men, are too many to *wheele* down one *Intervalle*, (for that they will be so long, before they can cleere the front) therefore you may cause *Intervalles* to be made, between the midst of each division, as you may perceive in the *Figure*. The first rank having fired, and wheeled off, the next ranks are to move forwards into their ground: they which wheeled off, in the meane time placing themselves in the reere of their own divisions of *Muskettiers*. The next rank of *Muskettiers* having fired in like manner, are to *wheele* off, and to place themselves, as afore said: the <sup>m</sup> rest of the ranks of *Muskettiers*, (successively) are to do the like, untill they have all given fire, (once or oftner over) that way, according to the occasion. And in this interim may the <sup>n</sup> *Bow-pikemen* be bountifull in bestowing their *showers* of *arrowes*, amongst the thickest of their *enemies*.

If the *horse* prevaile so much, that the *Muskettiers* may not endure to beare the *brunt* of them: <sup>o</sup> then let the *Muskettiers* (after they have fired) *wheele* off, and place themselves in the reere of their following divisions of *pikes*: they moving forwards, and maintaining the *Muskettiers* ground; charging with their *pikes* (as they see occasion) for securing the *Muskettiers* in the midst. This notwithstanding, if the *enemies* *horse* shall still presse forwards; and with their shot shall continue to annoy the body (the *pikes* on this figure being especially *defensive*;) then cause

<sup>m</sup> If there be more ranks of *Muskettiers* then is represented in this *Figure*.

<sup>n</sup> The *Bow-pikemen* (if at any time usefull) have in this *Figure* good meanes to imploy their dexterity.

<sup>o</sup> A second way of placing the *Muskettiers*.



p A third way  
of firing on  
this Figure.

q The reduce-  
ment.

r A second  
way of reduce-  
ment.

the *Pikemen* to charge at the foot, P and your *Muskettiers*, to give fire over them : according to former directions, on the *Convex half-moone*. After this manner, the *battell* may be continued to the last rank. When you have given fire in this order, your *Muskettiers* being all in the reere of your *Pikes*; and if you be minded to reduce them, into the first orderly square, this is one way for it. q *Pass* through your *Muskettiers* before your front of *Pikes*, as they were before the firing : that being done, let the *Commander* face the whole body to the left Angle, of the front division, by which meanes he shall there finde the halfe of his file-leaders. This being performed, let them march : and so even their ranks and straiten their files; the reere division of *Muskettiers* and *Pikes*, orderly following after the front division of the like *Armes*. After this, let the halfe-files which then are (which indeed are the residue of the file-leaders) double their ranks forwards to the left: which being performed, the men are reduced as at first.

r If you would reduce them some other way, without passing through your *Muskettiers* (as I have formerly said) then first let the whole body face to the left Angle of the front division ; and march, evening their ranks and files, as aforesaid. Which being done, cause the halfe-files (which then are) to double their front to the left ; which being in like manner performed, all your *Muskettiers* are still in the midst. Your next work, is, to cause your *Muskettiers* to face to the right and left outward: and your *Pikes*, contrariwise, to face inward ; and so to pass through, and interchange ground. Thus being

ing faced to their front proper, they will be reduced, as at first.

If any will be practising of this forme of battell, with a smaller number of men (as with 64. or fewer) whereby they will be constrained to double their halfe-files: then they will be reduced the same way: onely they shall not need to double their halfe-files againe, in their reduction: as they must needs do, were the number larger.

## CHAP. CVI.

Of the Sollid Square, with Muskettiers in Center and Angles. The way to make the Figure with a private Company: how to fire upon it, and to reduce it.



Infinite are the formes and figures of Battell, which may be made; yet all differing, either in circumstance or matter. Some of them are Sollid, others Hollow: some of them, being Trines, Squares, Hearses, Cirtes, Cressents, Crosses, Diamonds, Plinthiums, Plesiums, Paramekes, and infinite others. Some of them taking their denomination from the nature of their numbers. Others according to the placing of each Armes. A third sort, taking their names from things they most resemble, all of them being necessary to be knowne, to such which would be accounted skilfull Serjeant-Majors: that so with all numbers, upon all occasions, they may

(Majors ought to be of singular skill and experience, that so they may at all times be able (having observed the situation and place) to draw their men into formes most advantageous to themselves and offensive to their enemies.

may readily bring their *Souldiers* into any forme or figure of battell (according as the *time*, the *number*, and *place* will give them leave) for *opposition* either of horse or foot, or of both conjoyned.

Excellent was the custome of that worthy *Philopæmen* the *Achayan*, who when he walked or travelled abroad with his friends and familiars, would marke and peruse the situation of the Countrey about him: and so continue and discourse to his companions, that if it so happened an *Army* to march that way: Then he supposing to have under his command such a number of *Souldiers*, ordered and appointed in such a manner, and marching towards such a place; where being upon such a ground encountred, by the greater and better prepared *Army*: Then would he put the question; whether it were fit for him to hold on his way, retire, or make an halt: what peece of ground were meetest for him to seize on, and in what manner best to do it; in what forme to order his men, and how and in what numbers to place each *Armes*; where to bestow his carriage, and under what guard to leave them. Next would he propound, if that the *enemie* were for the present beat off, then how with the most conveniency to encampe that night, which way, and in what manner were his best to march the next day: by these and such like continuall discourses and meditations, he was grown so exact and perfect, that he never met with any difficulty; whence he could not explicate himself and followers.

Now after so large a digression, return we back to our single Company; the work of this Chapter, being to shew the *Plesium* or long square. In which the  
*Muskettiers*



*Muskettiers are halfe in the midst of the Pikes ; and the other halfe equally divided, and placed on the 4. Angles of the battell: the Pikes making 4. divisions ; as being placed upon the front, reere, and flanks. But not to hold you with longer circumstance, take these words of command and direction, which produce the following Figure.*

*Halfe-files, double your front to the left entire :*

*Only do not close them, to make one Body.*

*That being done, your Body will be but 4. deepe.*

*Next, command the 2. outmost wings of each Body, to double inward, by division.*

*For better satisfaction, observe these directions.*

*First, see the halfe ranks of the outmost flanks, faced to the front and reere : and that they march, untill they are cleere of the standing part of the battell.*

*Secondly, cause the halfe-ranks of the right flank, and the halfe-ranks, of the left flank, to face in opposition, and to close their divisions : the two first ranks of each flank, moving crosse the front of the standing part of the body ; and the two last ranks of each flank, moving crosse the reere. Then, the whole body facing to the front, they will stand as in this Figure.*

*The*

## The Plesium.

E C

S m m m m D p p p p p p p p D m m m m S  
 m m m m p p p p p p p p m m m m  
 p p p p m m m m m m m m p p p p  
 p p p p m m m m m m m m p p p p  
 p p p p m m m m m m m m p p p p  
 p p p p m m m m m m m m p p p p  
 m m m m p p p p p p p p m m m m  
 S m m m m D p p p p p p p p D m m m m S

If you would give fire upon this *Figure*, it may be performed either to the *front* and *reere*, to the *right* and *left*, or to *all foure* together. But which way soever the *firing* be, let the *Aspect* of the *Muskettiers* in the *midst*, be turned the same way, and cause the *Pikes* which stand *before* them, to *charge* at the *foot*, and the *Muskettiers* in the *Center*, to give fire over them. The *first rank* having *fired*, let them kneele (or *crouch* low) upon the ground; making *ready* againe: whilest the next *ranks* behinde them, give fire, and do the like: and so forwards, for the rest. Having all *fired once over*, this way, let them rise up: and (if need be) give fire over againe, after the same manner. The *Muskettiers* on the *Angels* (in the *interim*) giving fire after the ordinary way, wheeling off, and falling in the *reere* of the *Muskettiers* of their own *divisions*; the others in the meane time moving forwards, and making good their *leaders ground*. This being done, and the *Pikes* having charged; the *Figure* will still continue to be the same,

same without alteration. And that as well in *men* as *matter*: if so be the *firing* be performed, according to the former *direction*.

For *reducement*, command the two *first ranks*, and the two *last ranks*, to *face* to the *right* and *left*: all *Marching forth*, untill they are *cleere* of the *standing* part of the *bodie*. The *reducement*.

Next, command them to *stand*: then, *face* them to the *right* and *left* inward, and *close* their *divisions*. This being done, let them *face* all to their *leader*. Lastly, by *commanding* the *halse-files* to *face about* to the *right*; and to *march forth* into their *places*; you shall see them fully to be *reduced*.

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## CHAP. CVII.

*Of the double crosse Battell and severall other formes from thence proceeding.*

I shall now proceed to shew some *formes*, for the *Imbattelling* of larger numbers. It being one of the most principall parts of the *Art Military*: to *Arange* your *Battels* into such *formes* as may bring most *hands* to *fight* with *conveniency*: so that one part of your *Battell* do not *cumber* or *hinder* the other. But by their orderly placing they may be *ayding* and *assisting* to each other. Appointing to every part, *maniple*, or *division*, their due number: what order they are to keepe, *when*, and *how* they shall *fall on*, that so there may be no disturbance in



in the time of fight. Therefore in the ordering of your Battels, you ought to be carefull of what may happen by *casualty or chance of fortune*: that so by a timely foresight you may provide *remedies*.

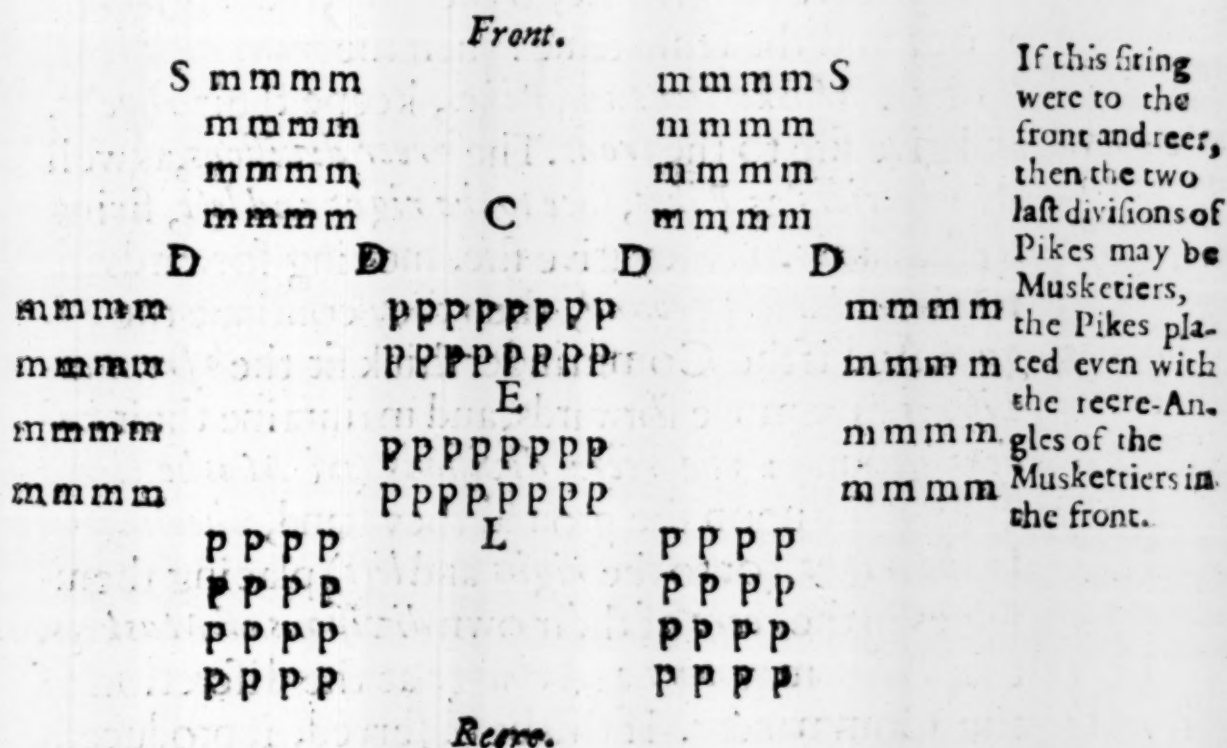
Especially take notice, that you alwayes have *reserves* ready, both of *Horse and Foot*, (if you have them in the field) that so by their *timely assistance*, the *broken, and distressed parts* of the Battell may be upheld and relieved.

For many times it so happeneth that such a *reserve* may be an especiall cause to gaine a *victory*; the want thereof (to the contrary) may be a meanes to hazard the losse of all. Of this you may reade *examples* enough in all *Histories*, both *Ancient* and *Moderne*. But I forbeare to wade further into these discourses, and therefore returne to the work of the Chapter.

Some Commanders have *Ranged* their *Armies* into one only Battell without either *wing* or *reserve*: some into two, others into three, some into foure, some into five, some six, seven, eight, nine, and some into more. Now although that this small number that I have pitched on be not sufficient to demonstrate the *Figures* so perfectly (when they are divided into many parts) as larger numbers would make them appeare; yet accept of them as they be. For I have purposely chosen so small a number: that such *Captains and Gentlemen as please*, may make use of them in their practice. The *Command, Direction, and Figure*, followeth.

The

The Command is,  
*Muskettiers march (untill your halfe files range  
 even with the front of Pikes, then) stand.*  
*Halfe-files (of each Armes) face outward, and march  
 (untill you are cleere of the Angles of your own  
 Armes, then) stand: face all to your leader.*



If this firing  
 were to the  
 front and rear,  
 then the two  
 last divisions of  
 Pikes may be  
 Muskettiers,  
 the Pikes pla-  
 ced even with  
 the reere-An-  
 gles of the  
 Muskettiers in  
 the front.

Your *Bodie* being drawn into this forme, it stands  
 aptly for *firings in front*: but may very fitly serve  
 for to give fire to the front and both flanks. If you  
 would fire to the front, and preserve your Figure;  
 then the *Muskettiers* must move forwards, into  
 their leaders ground. If you please you may move  
 forwards your *Rear divisions of Muskettiers*, and  
 make wings of them, to begin the *skirmish*: having  
 fired once or twice over they may retreat into their  
 places; and then the front divisions may entertaine  
 the

This Figure  
 fit to fire to  
 the front and  
 both flanks.

Skirmishing in  
 front with  
 wings.

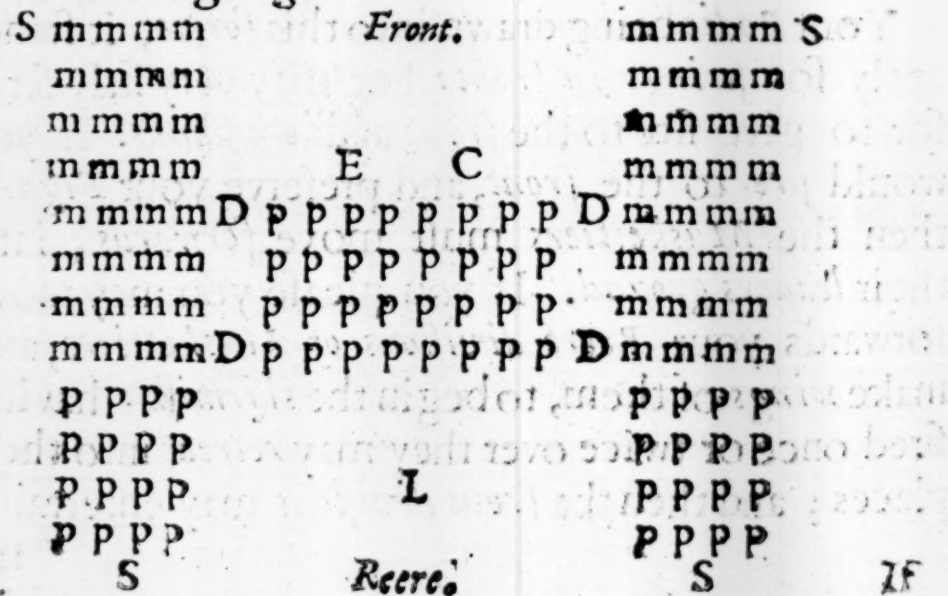
the *skirmish*, and fire two or three times over. The *reere divisions* may also give fire with them, at discretion of the Commander. The *Pikes* in the mean time, are to *advance*, move forwards, *port*, *charge*, *stand*, *retreat*, all according to the *direction* of their command, or *beat* of the *Drum*.

Directions for the firing, to the front and flanks.

a Reere divisions are the halfe file-leaders.

b This firing altering the place of the Muskettiers in flank varieth the former forme to this ensuing Figure.

If you would give fire, to the *front*, and *both flanks*, at one and the same time: then the *front divisions*, both of *Muskettiers* and *Pikes*, keepe their *Aspects*, and give fire to the *front*. The *reer divisions*, as well *Muskettiers* as *Pikes*, face to the *right* and *left*, firing to the *flanks*. If they give fire, moving forwards into their *leaders ground*, then they continue the *Figure*. And if the Commander think fit the *front divisions* may move forwards, and maintaine their *leaders ground*: the *reere divisions* (of *Muskettiers*) giving fire upon the ground they stand, *wheeling off to the right* (or to the *right* and *left*) placing themselves in the *reere* of their own *divisions of Muskets*, the *Pikes* may *port* and *charge* at the discretion of the Commander. If this be observed, it produceth this following *Figure*.





If you will give fire on *this figure*, it is to the front, having fired once or twice over, the front division of Pikes, may move forwards *porting* untill they Range even with the front of the Muskettiers, and there *charge their pikes*, the Muskettiers still continuing their firing. The *Reere divisions of Pikes* in the meane time *facing to the right and left outward*, and *fleeving up on the flankes of the Reere division of Muskettiers*: there in like manner *charging their pikes*, either to the front or flankes according to direction; which produceth this following Figure.

\* If you would make this figure, from the Square (of Pikes flanked with Muskettiers; it is no more but ) Command; halfe files of Pikes, face to the Right and left outward, and passe through to the flankes of your Muskettiers, ( then ) stand, and face to your Leader.

\* A second way to make this Figure.

Front.

C

S	m m m m	D	p p p p p p p p	D	m m m m	S
	m m m m		p p p p p p p p		m m m m	
	m m m m		p p p p p p p p		m m m m	
	m m m m		p p p p E p p p p		m m m m	
p p p p	D m m m m				m m m m	D p p p p
p p p p	m m m m				m m m m	p p p p
p p p p	m m m m				m m m m	p p p p
p p p p	m m m m				m m m m	p p p p
	S				S	

Reere.

X

I

I cannot stand to enlarge my selfe upon every figure, to shew the *severall firings* that may bee produced from them: let it now suffice that I demonstrate *the figure*; and give directions how to *make*, and *reduce* them: any ingenious Reader that hath well perused my Booke, must needs (by this time) bee able to conceive the *severall wayes* and *firings*, that each figure may produce, almost at first sight. And therefore I will spare the paines, and come to the *Reducement* of this figure, lest the Chapter prove too long. Having *given fire* upon this figure, either to the *Front* or *Reere*, or to both together, and the whole *Body* againe *faced* to the *proper front*.

\* Reduce-  
ment.

\* Command the *outmost divisions of Pikes* to *face to the Right and left inward*, and *lasse through the Muskettiers into their places*: then *face to the front*, and all is *Reduced*.

## CHAP. CVIII.

*Why it is necessary to know variety of forme: The way to make foure severall figures, demonstrated in this Chapter with their Reducements.*

\* He that shall alwayes accustome himselfe unto one forme of battell, gives his enemy too much advantage.



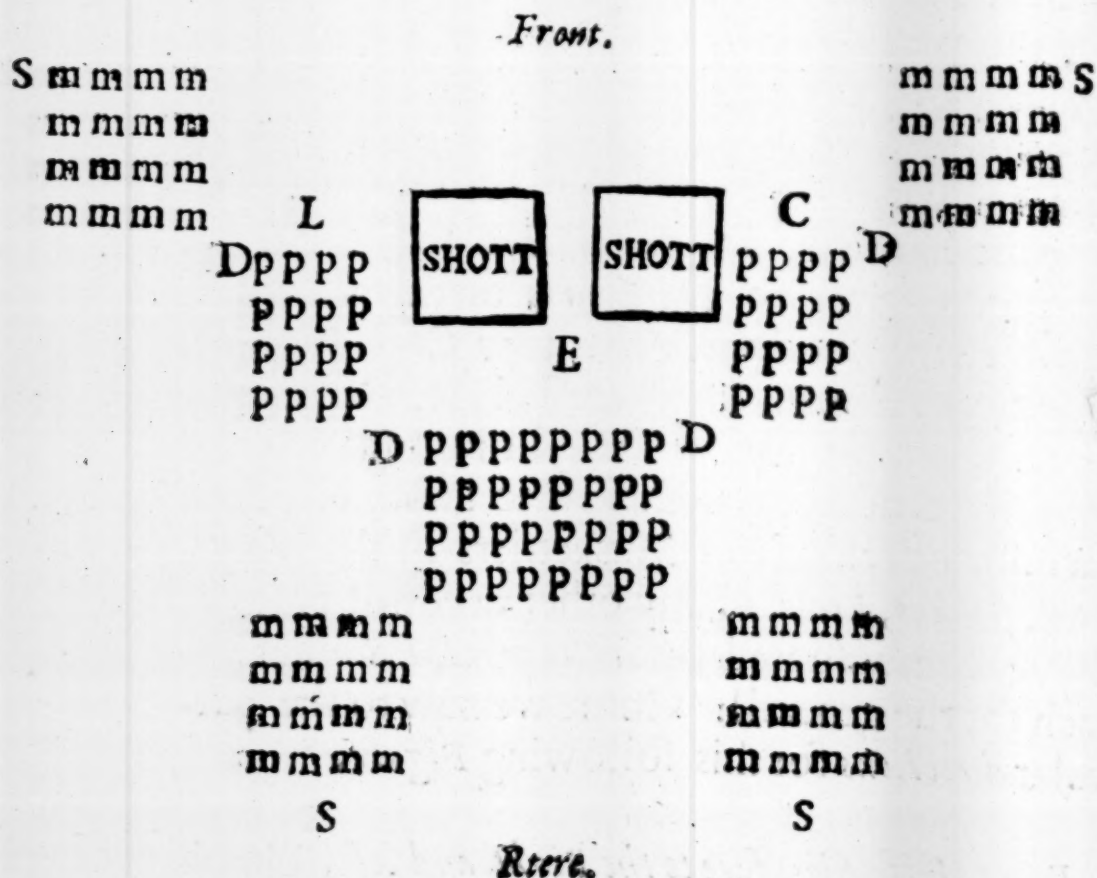
Hee that will *Range his Battallions* alwayes into one *forme*, may bee likened to that *Physitian*, or *Chirurgion*; that for all *sicknesses* or *sores*, hath the selfe-same *potion* or *plaster*. Not considering, that *time*, *number*, *place*, *quality of Armes*, and many other like *respects*, will bee great sticklers in the *ordering of Armies*. Moreover the *number*

ber of the *emie*, his exceeding; either in *horse* or *foot*, the placing of his *Ordnance*, the order of his *aray*; any of these, or other such like, may induce the *politicke* and *wise* Commander sometimes to alter, and vary his *forme*; as may be most *advantageous* for himselfe, and *prejudiciall* to his *emie*. But proceed wee to the *figures* of this Chapter, the which may be done, either by a *single Company*, *Regiment*, or *Armie*. \* Neverthelesse, although I \* Every com-  
have no more *divisions* of *shotte* in my *figures*: yet pany ought to  
if you have numbers sufficient to imbattell, then be two parts  
place more divisions of Muskettiers in the *Wings*, shot, the third  
*Front*, *flankes*, *Reere*, or any other needfull part: as part Pikes.  
I have demonstrated by *little printed Squares*: so  
much for the generall. Come we now to the par-  
ticular *directions* for this following *Figure*.

*Front Halfe-files, face to the Right and left, March* The Dire&ti-  
till your Pikes range even with the Musquets on to make  
of the *Reere halfe-files* ( then ) *stand and face* this forme  
to your Leader. with a single  
Company.

*Halfe-files of Muskettiers face to the Reere* ( that  
done ) *Muskettieres* ( both of front and *Reere di-*  
*visions* ) *March to the Angles of your Pikes* ( then )  
*stand*, and face all to your Leader, or proper  
*Front*.



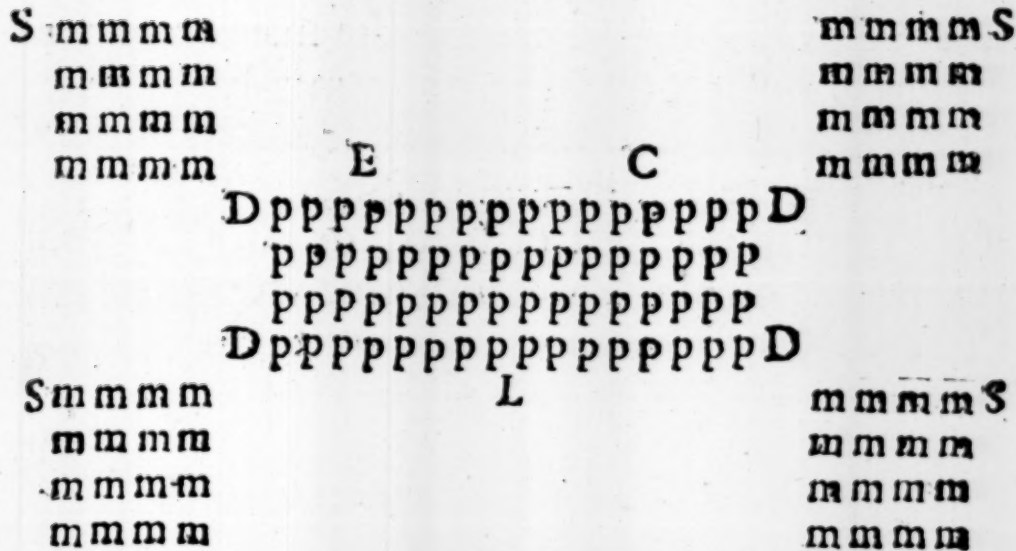


The way to  
fire, and alter  
the forme.

In this *forme* you may give fire, to the *Front* or *Reere*, or to both together. You may *give fire*, and still continue your *forme*: or if you please, the *Battell of Pikes*, may move forwards, and *Range even* with the *Flanke-divisions of Pikes*: the *Reere-divisions* of Muskettiers *facing outward*, and moving after the *Front divisions* of Muskets, even with the *Reere Angles* of Pikes, which produceth this ensuing *Figure*.

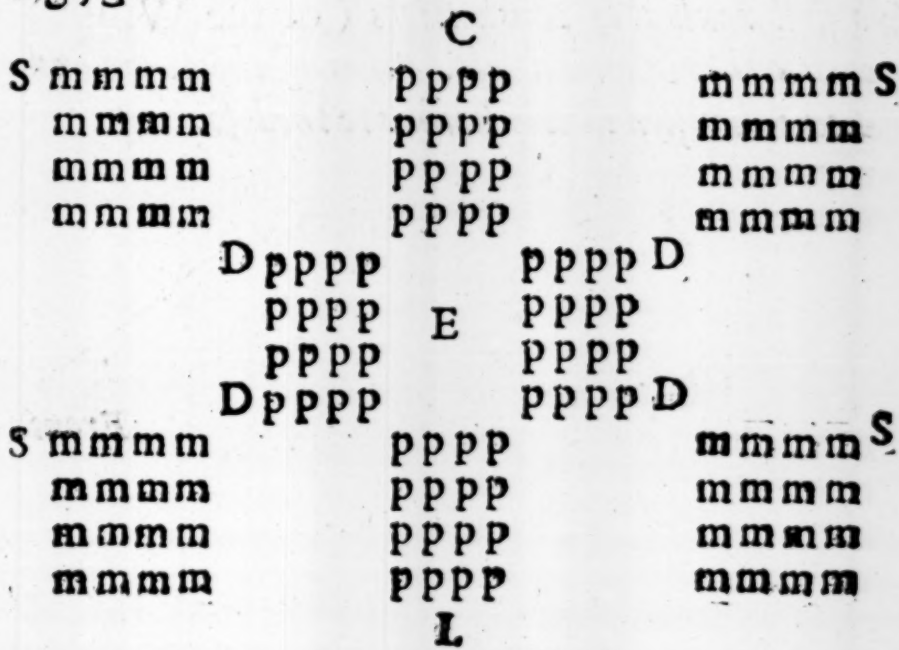
*Front*

Front.



Reere.

If you cause the *two first Rankes* of the \* Battell \* The Battell of Pikes to move forwards, and the *two last rankes* of Pikes are those under of the Battell of Pikes to move towards the Reere: E, in the first and then *double their files*, it will produce this ensuing figure. Figure of this Chapter,



X 3

If

If you would skirmish on this figure, the Muskettiers are so placed, that they may give fire any way: the Divisions of Pikes in like manner, either in single Bodies, or three of them a-breast, may move forwards into the Front, or if occasion be into the Reere, porting, and charging at discretion. Having marched or fired (or both) in this forme: if you please, wee will proceed to another. The words of Command, and direction are as followeth.

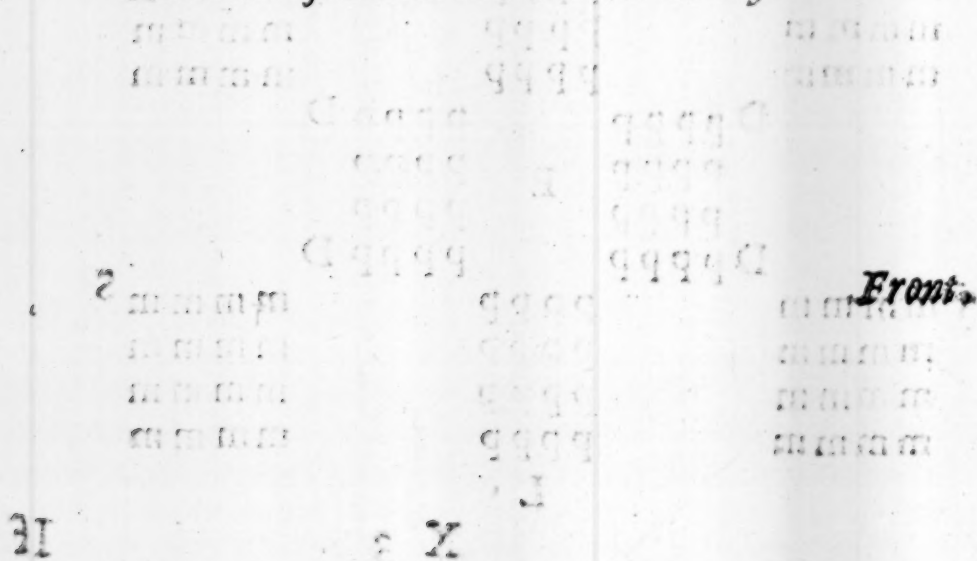
\* Direction  
to make this  
Figure, with  
a single  
Company.

\* *Wings of Muskettiers, move forwards, and Ranke your Reere, even with the front of Pikes.*

*Flanke divisions of Pikes, face outwards, and march, untill you stand cleere, of the out-most Reere Angles, of the Front-division of Muskettiers. Then face as before.*

*Reere Divisions of Muskettiers, move forwards, into the place of the Pikes that removed.*

*Two first rankes of Muskettiers (of the Wings) open to the right and left. Pikes of the Front and Reere-division double Rankes to the left.*





*Front.*

S m m                  m m                  m m                  m m S  
m m                  m m                  m n i                  m m

m m m m                  C                  m m m m  
m m m m                  m m m m

p p p p p p p p  
P P P P P P P P

D                  D

S                  S

p p p p D                  m m m m                  m m m m                  D p p p p  
P P P P                  m m m m                  m m m m                  P P P P  
p p p p                  m m m m                  m m m m                  P P P P  
P P P P                  m m m m                  m m m m                  P P P P

E

L

**SHOTT**

P P P P P P P P  
P P P P P P P P

**SHOTT**

*Reere.*

When you peruse this *figure*, *sleight* it not, because of the *thinnesse* of the numbers in each part. But conceive that where *two Rankes* are placed *single*, there for service, peradventure *two Companies* ( or more ) may bee drawne up, and so *answerable* for each other part, according to the *Number and ground*. When you give fire upon this *Figure*, whether with a *single Company*, or more *conjoynd*, it must be in a *Regementall* way. The *Pikes* stand *ready ordered* if need be, to *Relieve the Muskettiers*. But come we now to the *Reducement* of our *Company* againe to their *first order*, wherewith we will conclude this Chapter.

Reduement.

*Two first rankes (of the wings) of Muskets, close your Divisions. Reere divisions of Muskettiers, move forwards, and close your divisions, after the Muskettiers in the Front. Two first rankes of Pikes, Close backe; to the two Rankes in the Reere. Flanke divisions of Pikes, face inward, and close your divisions. (Lastly Command) Pikes, move forwards and even your front of Muskettiers. If there be any Intervals (or Divisions) in the flankes, Close them; and all is Reduced as at the first.*

## CHAP. CIX.

*The Trayned bands, one of the three maine strengths of this Land; the wayes to make them perfect Souldiers in the handling their Armes : The Checker battell, with severall other formes, either for a Company or Regiment.*



*T* was the Spartan Glory, being demanded of her walls : to present a grosse of Millitary bodies. Wherewith they not only for many Ages defended themselves : but raised their fame to so high a pitch, that they became Terrible to others. Our Inland with Sparta, hath no other Forts, fastnesse, or Fortifications, to withstand the Enemie, save our (I would I might have said Experimented) Souldiers brests. Take a Survey of the whole, and you shall see, that the strength of our Land (like the Roman Legions) consists of our  
 \* *Hastati, Principi, and Triarii.*

\* Tooke, his Legend of Bristow.

Our

Our Sea-men in their *Wooden Forts and Castles*. Our *Rocks, shelves, and Sirtes*, that lye along our *Coasts*. And our *Trayned Bands* on the *Land*, our last refuge, and *Chiefe Bulwarke* of defence. Now considering the *facillity* of the two former, how carefully ought wee looke to the later: That our *Souldiers* be often *practised*, and taught their *postures*, and well *handling* of their *Armes*: That there bee places provided for the \* *Muskettiers*, to shoot *bullets* at the *marke*, (and *prizes* for them that doe best.) That there bee places appointed for some *Squadrons*, and *divisions* of each *Armes*, to meet for one *houre* or *two* in the *weeke* (at times most convenient) to be instructed in *motions* and *firings*, by the severall *Officers* of each *Company*. That there might bee some *Imunity*, *priviledges*, or *allowance* to the *Officers* of the *Trayned Bands*, towards their expence of time and charges. That there should bee *Countenance* and *incouragement*, given to those that are diligent in the *practise* of *Armes*, and the studie of the *Art Military*. These, and such like *honeydewes*, would water the parched barrennesse of our *Millitia*, and fatten the Root, to a fragrancy of experiment: *Initiating*, and suppling the *Nerves* and *joynts*, to an *activenesse* of motion. The want hereof, leaves us *dull* and *snoring*, in the lap of *stupid security*: and renders us *rediculous*, in the eyes of our *enemies*.

But pardon my digression, the Zeale of my Countries good, had almost intricated my intentions: Casting me a-shore, where I had not the least intent to see the Land. Now with your good leave, I returne to the

\* Many of the trayned Bands dare not shoot a Bullet for want of practice And very few know, what proportion of powder to use to give the due charge.



the worke of this Chapter. In the which, and the former I for the more delight of such Captaines and other Gentlemen, that love to practise *numerous formes and figures of Battell*, have fitted and stored them with *variety*; Some for the *curious and quainter* Souldier; Some for the *solliid and experimented* Souldier; and some to direct the *unskilfull and ignorant* Souldier; That so either may come and feed according to his owne fancie, and not bee *cloyed* with a continuall intercourse, to one and the selfe-same *dish*. The Command and direction for the first Figure followeth.

*Two first and last rankes of Pikes, face to the Right and left outward.*

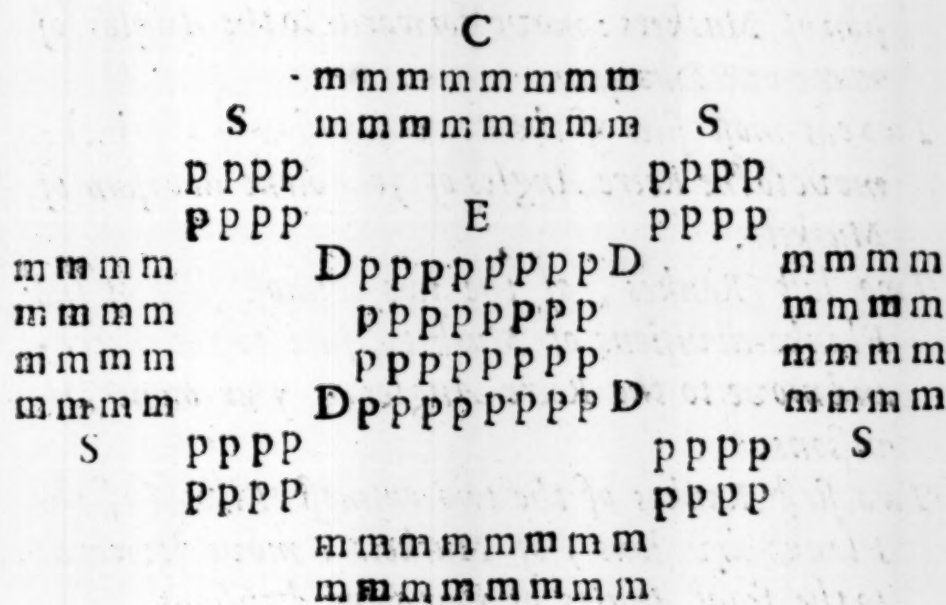
*Two first and last rankes of Muskettiers, face to the Right and left inward. That done.*

*Interchange ground, and face as before.*

*Lastly, Muskettiers of the Front, Reere, and Flankes, move to the Angles of the Pikes.*

*Front.*

Front.



With larger  
Numbers  
where these  
are but two  
deepe, make  
them 6. 8. or  
10. deepe.  
This is a very  
good forme  
for the Mus-  
kettiers with  
halfe Pikes.

Reere.

In this forme the Muskettiers may give fire to the Front, Reere, or Flankes, any way, or every way. If you fire to the Front, the Muskettiers of the front division having fired two or three times over; the two divisions of Pikes on their Angles may advance and Charge, whilst the Muskettiers that last fired, face to the Right and left by division, and place themselves behind their Pikes; The Muskettiers of the flanke in the interim, moveing forwards, and firing at discretion; The Reserve, or Reere-division of Muskets, may in like manner be brought up to fire, as you see fit; each Division may be shelterd by their Pikes. From this take a second Figure, with a little alteration. The Command direction, and Figure followeth.

To

By two outmost Files, understand the two outmost Files on each part, as well of Front and Reere, as Flanks. And although two deepe cannot properly be termed a File; yet let it produce no criticisme, seeing it could not be avoyded, considering my number.

*Two outmost files of each Flanke of the Front division of Muskets : move forwards to the Angles of your owne Division.*

*Two outmost files of the Reere-division of Muskets : move to the Reere Angles of your owne division of Muskets.*

*Two last Rankes, of the two outmost files of the Flanke-divisions of Muskets, face to the Reere; and move to the Reere Angles of your owne Divisions.*

*Two first Rankes of the two outmost Files ( of the Flanke-divisions ) of Muskets : move forwards to the front Angles, of your owne divisions.*

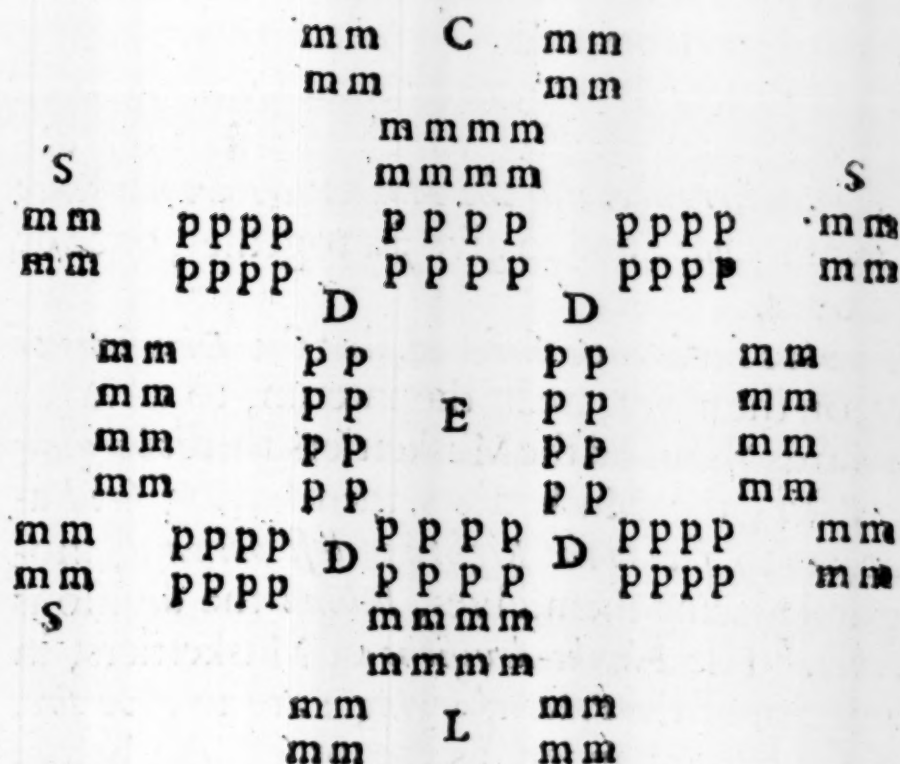
*Foure inmost files, of the Battell of Pikes : face to the Front and Reere : ( then ) move to the Angles of your owne division of Pikes.*

*The whole Body face to the Front.*

**Front.**



Front.



This is a very good forme for the Muskettiers with halfe Pikes.

Retre.

Although this *Figure* be here demonstrated by such small *Divisions* of men, let it not perplex the opinion of its worth, rather cast your eyes on the severall *divisions* of each *Armes*, and supervise their orderly placing. How offensive to the enemy, how defensive to themselves. To demonstrate the severall wayes of firing upon it, would prove as tedious, as needlesse: Let it suffice that they may fire, advance, retyre, power on their shotte, and retreate behind their Pikes, Inlarge their *Intervals*, or joyne into one grosse, any of them, or all of them, at discretion. Come we now to a *firing*, that shall produce another

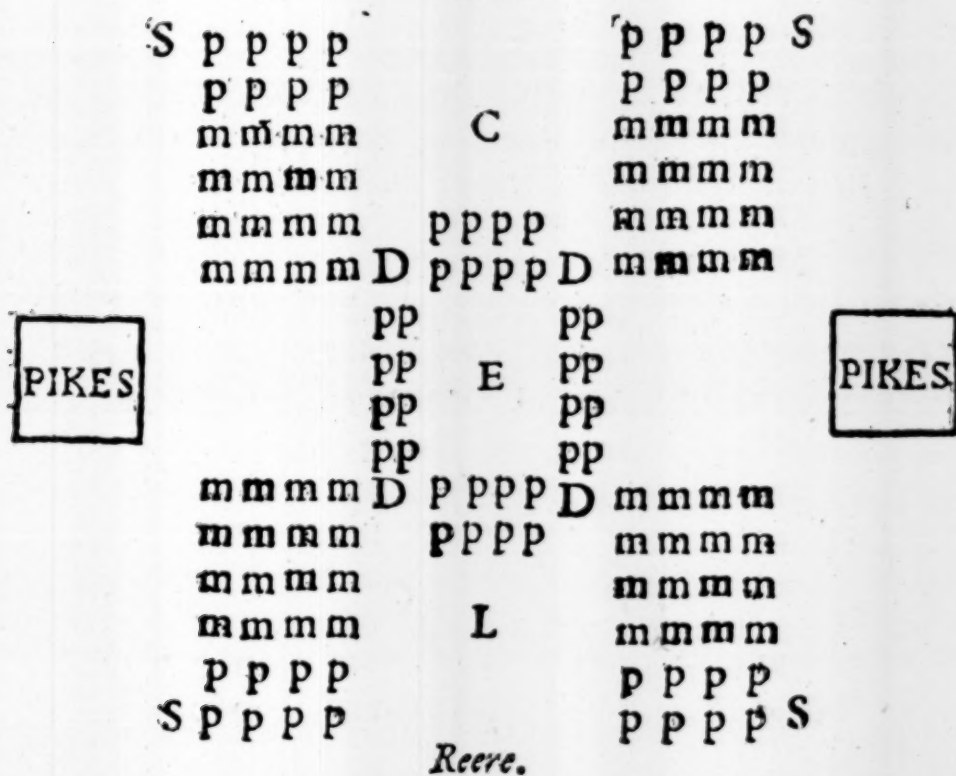
\* A firing to produce another *Figure*.

ther *Figure*. Let the *firing* be directed to the *Front* and *Reere*, and to that end command *halfe the Body to face about* ; the outmost files of Muskettiers (which were advanced) *begin the firing*, doing their *execution* on the same ground (without moving forwards at all) by which meanes they become *even in ranke with the Muskettiers from whence they were drawne* : and so give *fire* together, once or twice over.

You are further to observe, that the *Divisions of Pikes*, on the *wings*, are in the interim, to advance (forwards) beyond the Muskettiers, there *charging their Pikes* ; the Muskettiers then having *fired againe*, are to *face to the Right and left outward*, moving and placing themselves, *behind* the divisions of *Pikes*. The *Flanke-divisions* of Muskettiers, in the interim of the *Pikes charging* : are to *give fire*, after the same manner, as the others did before them ; And lastly place themselves *behind the Shot*, that began the *firing*. The *Bodies of Pikes*, in the *midst of the Battell* (if occasion be) may move forwards and *charge* : if they keepe their standing, and *face to the first Front* ; this insuing *figure* will be produced, &c.

*Front.*

Front.

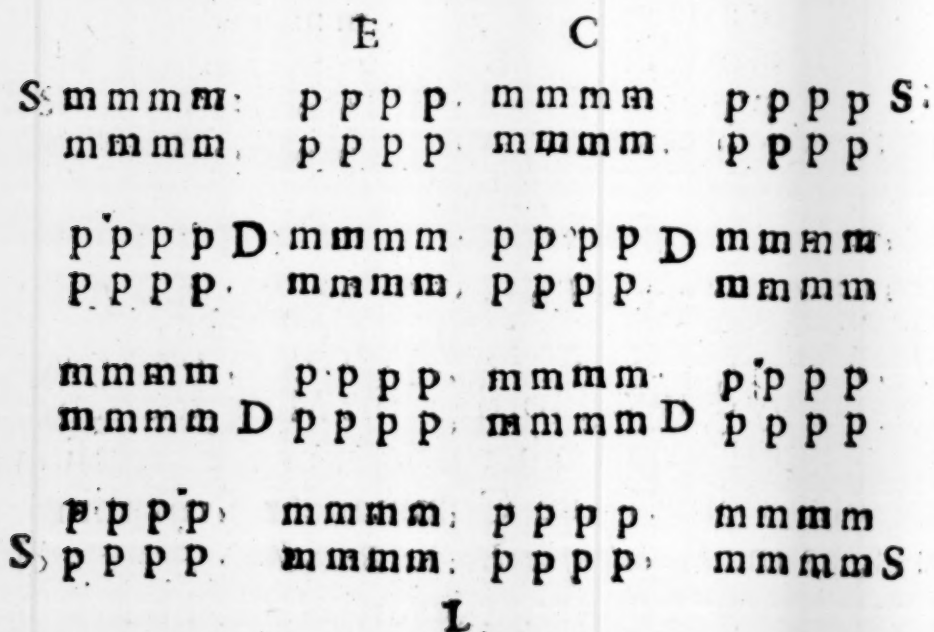


This figure, according as the Muskettiers stand now placed, is most fit for firings by *extraduction*: but may by drawing forth of the Muskettiers, be *varied* into severall other *formes*, as the occasion and discretion of the Commander shall thinke meet, as the *Quadruple Horne Battell* to *Front* and *Reere*, and many others. Neverthelesse, because I would not be tedious, I will next forme the *Checker Battell*. \* Therefore to that end, cause the *Pikes in the midst*, to *Close their Divisions*. (That done) let the Battell of *Pikes face to the Right and left outward*, and place themselves even betweene the divisions of Muskettiers; and all face to the *Front*. This being done, the Body stands divided into two deepe *herfes*.

\* The direction to make the Checker Battell: either with sixe divisions of each Armes; or with eight divisions.



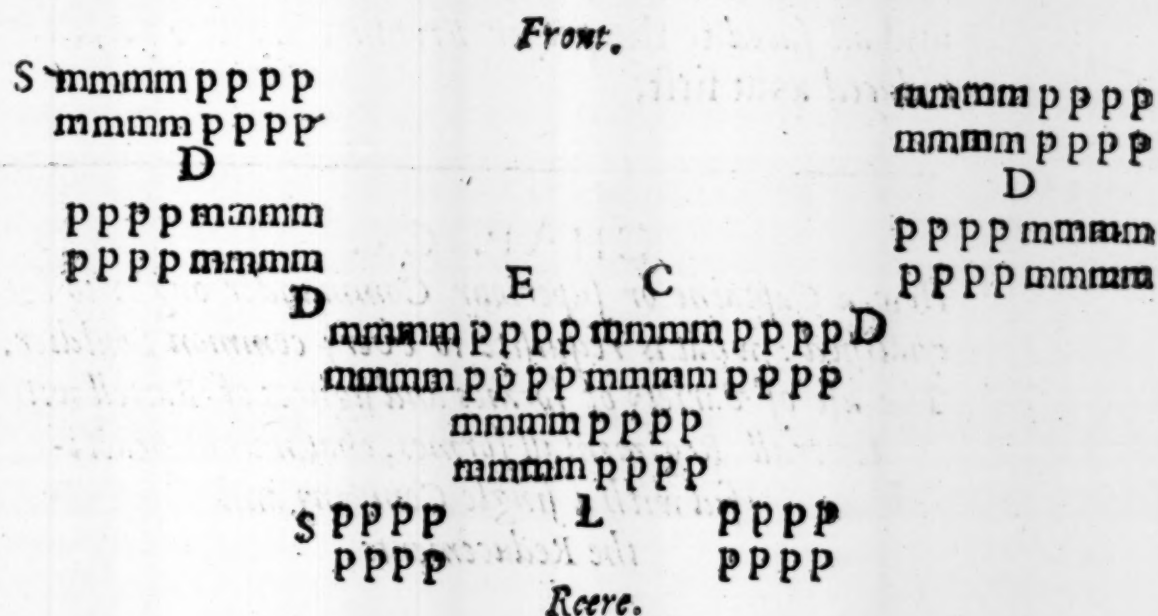
hearse. Next Command, *first foure Rankes ( of each hearse ) stand : the Rest, by foure rankes in a division, move forward, and Range even with the Front.* This being performed, your Body stands in a long *Checker Battell*, 4 deepe, and 32 a-breast. If you will make them 8 deepe, with 12 *divisions* ( sixe of each Armes ) *Checkerwise* : Command one of the *flanks*, to *double the other by division.* If you please to make 16 *divisions Checkerwise*, and 8 *deepe* ( which is the Figure now intended ) Command, *left Flanke, double the depth of your Right flanke intire* : the which produceth this following *Figure.*



I should bee much too tedious, should I inlarge my selfe, upon the firings, and *figures of Battell*, that might bee drawne from this *Checker forme*. I shall demonstrate one, and so draw towards a conclusion of this Chapter: for the which command the \* *Front halfe of the Body, to face to the Right*:

\* By Front halfe, is to be understood, that halfe of the Body, next to the Front.

Right and left outward, ( then ) move to the Angles, of the standing part of the Body : ( That being done ) stand, and face to the Front againe : Next command, the Two Reere Angle-divisions, face about, and move to the Angles, of the standing part of the Reere ; then face to the front againe ; and it produceth this following Figure.



Any ingenious Souldier at first sight, may contrive severall wayes, and firings, upon this figure. And therefore not to discourse what may be done, nor with what varities to be done, I will come to the Reducement. To which end, in the first place, close yur divisions againe into the Checker Battell. Secondly command, the Front-halfe, of the Body, face to the Right, and move untill they are cleere of the standing part : then face as before. Thirdly, Command the foure outmost Files, to the Right of each division stand : the rest of the Body, by foure Files in a division,

x

*division, invert after the Right divisions. Now your Body stands in two Hearse Battells: let the hindermost, move forwards even a-breast with the formost, keeping the Intervall open betweene them. Fourthly, command all the Pikes, of both Divisions, face inward, and close their Divisions. Lastly, command Muskettiers and Pikes, both of front and Reere, close their divisions to the Battell of Pikes. This being done, and all faced to the proper Front: they are perfectly reduced as at first.*

### CHAP. CX.

*How a Captaine or superiour Commander ought to bee qualified: what is requisite to every common Souldier. The use of variety of formes and figures of Battell with severall Regimentall formes, that may be practised with a single Company and the Reducements.*

Politicke stratagems have many times produced great Victories.



Ext after our prayers, for Blessings from above; Policie, and stratagems of Warre, have beene found most prevalent; as more availing then numerous strength: Seldome fayling, most time gaining the Wreath of honour. Yea, perhaps by some meane and ordinary wile, the which being once knowne growes despicable, as falling within the capacitie of the meanest judgements. Of this holy Writ as well as prophane historie, is stored with sufficient examples.

\* The Souldiers love to their Generall: a matter very considerable.

A second meanes, conducing towards the advance of victory; is the \* Love of our Generall, Captaine,



tainie, or Commander; a *Fem*, more prizable and esteemate, then the best *Armours* of *prooffe*; as being of such force with the *Souldier*, that hee will never *shun danger*, nor refuse to hazard the greatest difficulties; (the further) thereby to *ingratiare* himselfe into the *favour* of our *worthie Chieftaine*, whom for his *Vertues* hee *really affecteth*. For the attaining or gaining this *love* of the *Souldiers*, It were necessary in the first place that such *Commanders* were knowne to bee well *qualified with skill*, having good \* *experience* of the *Warres*: for the \* *Experimented skill*. *Souldiers* will not easily *flinch* or *flye* from such a *Commander*, whose *wisdome, skill, or experience*, they are well *assured of*. Secondly, the \* *Valour* of our \* *Valour*. *Chieftaine* is not of least *importance* to confirme the mindes of the *multitude*: for the *courage* and *skill* of the *Commanders*, makes even a *cowardly people hardy*: the want thereof workes the contrary effects. Thirdly, \* *Justice*, for that *Captaine* which with \* *Justice*. *equity and justice* can rule his *Souldiers*, neither suffering them to doe *injury* to others, nor receive *wrong* to themselves, shall gaine the *love* of his *Souldiers*, and *feare* of his enemies. Fourthly, \* *Temperance*: and fifthly \* *Liberality*. These to- \* *Temperance and Liberalitie*. gether build up a man fit for the *Employment* of his *Prince and Countrey*. But whether am I *soaring*! let me checke my *flight*, and returne to the common *Souldier*.

“ *Zenophon* declareth that such *Souldiers*, as  
 “ serve God, and are obedient to their *Captaines*,  
 “ may boldly, and couragiously fight with their  
 “ enemies, not doubting victory. Adde these three

\* Souldiers  
should inure  
their bodies  
to hardship.  
Haniball, effe-  
minated his  
Souldiers: by  
once win-  
ning them, in  
Capua.

Excellent  
Commanders  
doe often ac-  
custome  
themselves  
to contrive  
and imbattell  
severall  
formes.

other pertinent necessities to every Souldier. First, to \* *harden the body*, that so it might bee *inured*, and made *capable to indure paines, want, and travell* with patience. Secondly, to *handle our Armes* with *facilitie and safetie*. Thirdly, to learne to keepe our *orders*, in *marching, incamping, and fighting*. The which as it cannot alwayes be, in one and the selfe-same *forme*; neither ought the *Armes* to be alwayes *placed* after one and the same *manner*; but bee *varied* according to the *occasion*, and the wise foresight of the *politicke Commander*. Therefore whosoever would bee perfect in this part of the *Art Military*, must often accustome \* himselfe to the contriving, and *drawing forth* of many and severall *formes of Battell* consulting their severall *Uses*. As some against *Horse*, others against *Foot*, some against *Horse and Foot*: Some for *streights*, some for *Campania*, some for *hilly, and Mountainous places*; other for *vallies, and watry places*: Some for *boggie and rotten grounds*; some for *woody and bushie grounds*; some for *night*, and some for *day*. These notwithstanding *time, number, and place*, will thrust in *accidents*, and often cause *alteration* of the most *settled, and selected formes*. Neverthelesse, the *Captaine* thus *sorted* for all occasions (like the *skilfull Chirurgion* having *salves* for every *sore*) may with more *boldnesse* adresse himselfe to such enterprises, as by *Command*, or *chance* shall bee cast upon him.

These considerations prompt mee to proceed: questioning the length of my discourse, that hath so long detained you from the *figures* of this Chapter.

Chapter. The which that I may timely remedie,  
Take the \* *Command, and direction* for this follow-  
ing *Figure*. Command the *Muskettiers of the two*  
*first and last Rankes face inward, the Pikes of the same*  
*Rankes, face outward, and interchange ground with the*  
*Muskettiers*. Secondly, command the *Reere halfe of*  
*the 8. innermost Files, face about :* (that done ) lastly,  
let the 8. *Files, so faced to the Front and Reere, move*  
*to the innermost Front and Reere Angles, then stand,*  
*and face all to the proper Front, by which this Figure*  
is produced.

\* The com-  
mand, and di-  
rection, to  
make the fol-  
lowing Fi-  
gure.

Front.



The Muskettiers of the Flank-divisions, may be drawne forth cleere of their Pikes, and fire any way, according to direction.

Reere.

Y 3

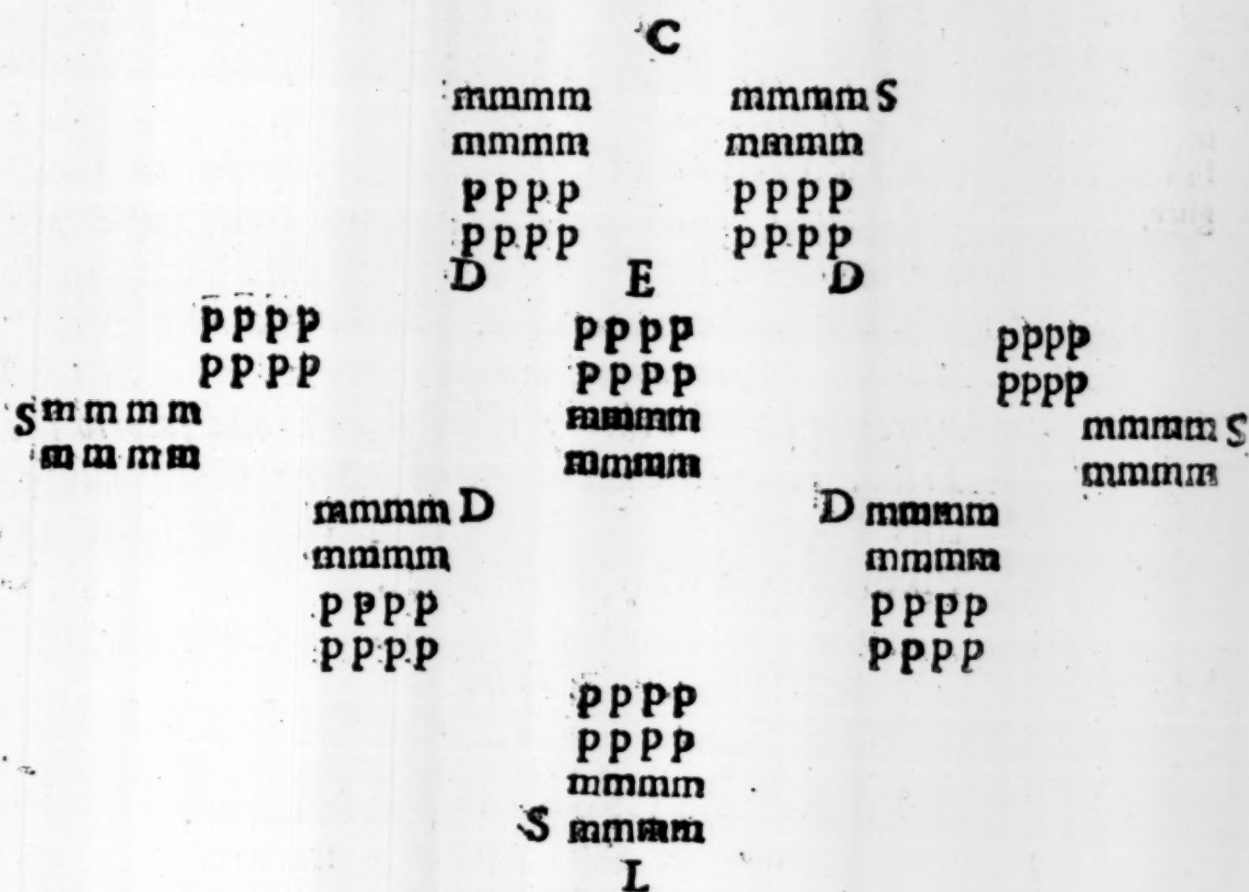
Having



Having fired at discretion upon this *Figure*, and brought them againe into the same order. Observe a second forme, drawne from the first. To make the which, Command the *first foure Rankes of the Flanke-divisions*, face outward, and move cleere of the last foure Rankes : then stand, and face as before. Secondly, command the *Front-division*, open to the Right and Left (untill they have made a sufficient intervall to receive another Division) then stand. Thirdly, command the *Left flanke (or Halfe rankes)* of the *Reere-division*, advance forwards, and place themselves behind the intervall, of the *Front-divisions*. Lastly, command the *Muskettiers*, on the outermost divisions, Face outward, and move cleere of their Pikes. These Commands duly executed, renders this following *Figure*.

*Front.*

Front.



Rear.

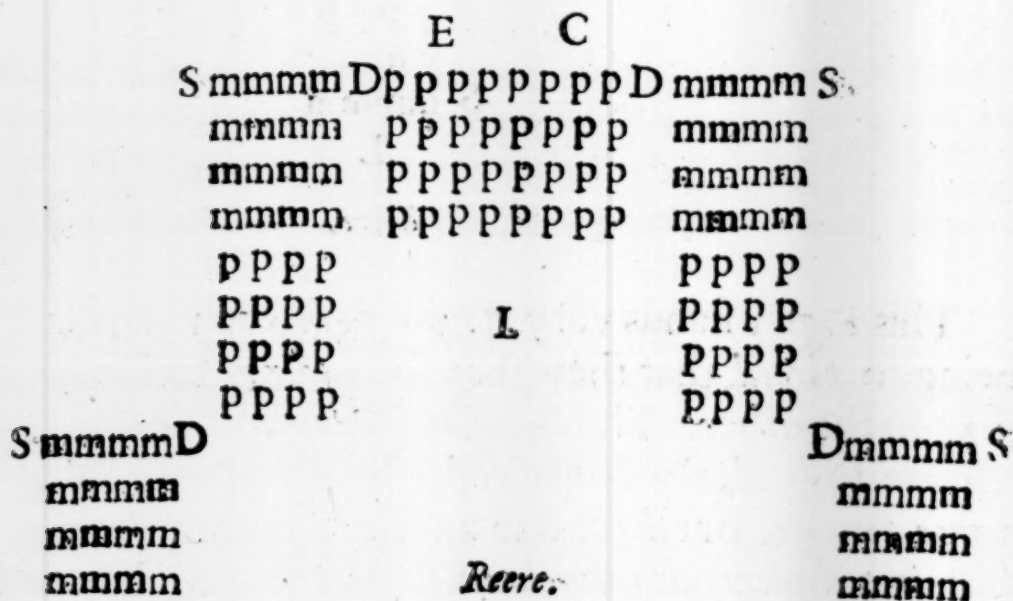
This Figure stands very apt for fight, each Armes being so placed, that they may be ayding, and assisting to the other. The Divisions, Maniples, or Battels are so orderly contrived, that they may advance, retire, or relieve one another, without any lette, impediment, or incumbrance. When you have given fire at discretion upon this Figure : if you would come to a Reducement, close the Divisions, backe into their places from whence you drew them : and cause the Pikes of the two first, and last Ranks to interchange

The Reducement.

\* The directions to make the following Figure.

terchange ground againe with the Muskettiers. This done, all is *Reduced* as at first. But before we come to the conclusion of this Chapter proceed wee to some *other formes* to fatisfie the desirous. The *Commands directions*, and *Figure* follow. \* *Halfe-files* ( of each Armes ) *face to the Right and left outward.* and *move* ( untill the Pikes stand right ) *after the Muskettiers of the Front halfe-files* ( then ) stand and *face as before.* Secondly, Command *halfe-files of Muskettiers, face about, and move downe, even with the Reere-angles of Pikes :* then *stand, and face to the Front.* By the execution of these Commands, this *Figure* is produced from the *ordinary square* of Pikes flanked with Muskettiers.

*Front.*



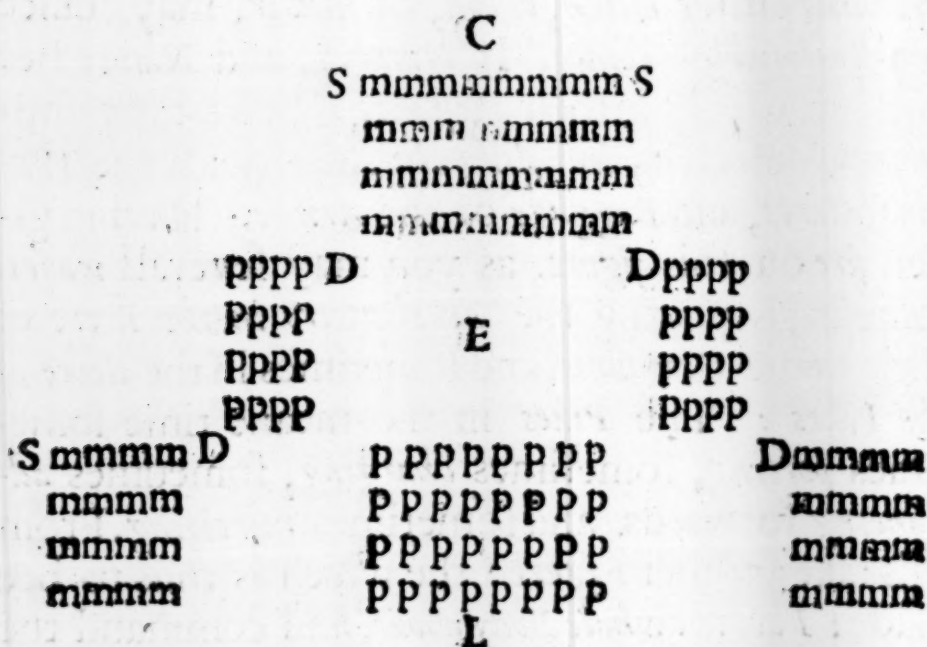
This *Figure* at first sight, shewes want of *reserves* in the *Reere*: the which must bee *supplied* either by *number*, by *nature*, or by *Art*. If *number* be wanting;



wanting; the \* *Naturall Scituation* of the place \* Naturall Scituation a-  
vailles much  
for the de-  
fence of a  
Battell. *affording either Ditch, Wood, or River, may suffice* as a *Reasonable defence*. If *Number*, and *Nature* bee both niggardly in their *assistance*: then let *Art* supply the defect, by *impaling the Reere*, with the *Wagons, Carts, and Baggage* of the *Armie*. Having given fire on this *figure*, as you may severall wayes, sometimes placing the *Muskettiers in the Reere* of their owne *Divisions*, and sometimes in the *Reere* of the *Pikes*: The *Pikes* in the meane time sometimes *porting*, sometimes *charging*, sometimes *advancing* forwards, and sometimes *retreiting*. From this take another *Figure*: the which is thus to bee made: *Face the whole Body about*, and command the *Muskettiers* ( the which then are in the \* *Front* ) to *Close their divisions*. Lastly, cause the *two Reere divisions* of *Muskettiers*, *face to the Right and left outward*, and move cleere of the *Pikes*, the which stood before them, ( this done ) peruse the *Figure*. \* This facing about hath made the Reere, the Front.

*Front.*

Front.



Reere.

The Body re-  
faced about,  
after the pro-  
per file-lea-  
ders.

When you give fire on this *Figure*, the *Muskettiers*, of the *Front-division*, are to *wheele* off, to the *Right and Left*. Neverthelesse, if you would have them *wheele* all off, to the *Right*, then *open* the *Muskettiers* in the *midst*, and make them an *Intervall*. Having *practised*, and *tried* your *Souldiers*, sufficiently on this *Figure*, wee will come to another; but first \* *face your body about againe after their proper file-leaders*. Secondly, command the *Front-division* of *Pikes*, *face to the Right and left* (then) *move* (and place themselves) *before, the two other divisions of Pikes*. Thirdly Command, the *two Front-divisions of Muskettiers* *move forwards untill their Reere bee even with the Front of Pikes* : (then) *face inwards, close their divisions, and face to the Front*.

This

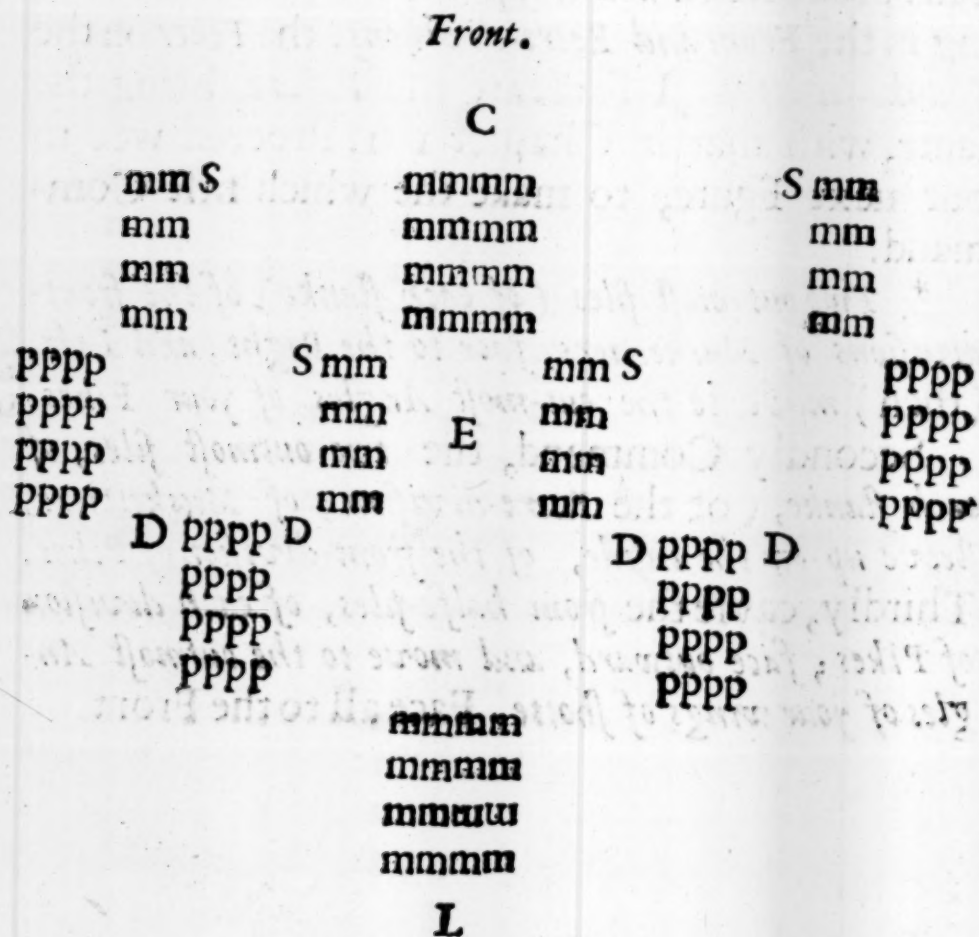
This produceth a hollow square, the Muskettiers being in the *Front and Reere-divisions*, the *Pikes* on the *Flanke-divisions*, I forbear the *Figure*, being the same, with that in Chapter 101. Proceed wee to our next *Figure*, to make the which first Command.

\* Two out-most files (of each flanke) of the front-divisions of Muskettiers, face to the Right, and Left, (then) move to the out-most Angles of your Pikes. \* The direction to make this following Figure.

Secondly Command, the two outmost files, of each flanke, (of the *Reere-division*) of Muskettiers, keepe up on the inside, of the front-division of Pikes. Thirdly, cawse the front halfe-files, of each division of Pikes; face outward, and move to the outmost Angles of your wings of shotte. Face all to the Front.

From





It were needlesse to tell you that this figure is most especially usefull for *firings in front*: Nevertheless, it may in like manner very fitly serve for *firings in the Reere*, provided that you face them about, and then move forwards your small divisions of Muskettiers into the Front; By which meanes in like manner it might bee made a serviceable firing. But not desiring to be tedious, I will come to the *Reducement*, and so conclude this Chapter. First, command the two outmost files (or wings) of Muskettiers,


The Reducement.

kettiers face inward, and close their divisions. Secondly cause the Muskettiers in the Reere, to move forwards into the Intervall streight before them. Thirdly, command the outermost divisions of Pikes, face inward, and close: then face as before, move forwards, and even the front of Muskettiers (this done, your Muskets are all in the midst, the Pikes on the flanks.) Lastly, command Muskettiers and Pikes interchange ground. This brings all into the first order.

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### CHAP. CXI.

*Of the Musket and halfe-pike, with the severall wayes that have beene tried to make the Muskettier defensible against the horse: As also, ten queries objected, to the halfe-Pike, and Musket.*

HEN I first began this Edition, I had not the least intent to speake any thing of the use of the halfe-pike and Musket, but have wholly reserved it untill another time; yet at the opportunity of some of my familiar friends, though it werelate, yet they were not willing it should be left out. Neverthelesse, when I considered that it had beene the *unhappy fate*, even of the *greatest and best inventions*, to bee imbased and vilified; yea, and to bee accounted of, but as idle fancies or dreames before they were published, and being once made knowne, suffering too much imbasement, as being often undervalued; and accounted of but as a thing, that every one could have well perfor-

performed. And hereof I might demonstrate many examples : Wherefore if the *passion* of *envy*, have in it any thing *allowable* and *naturall*, as having *anger*, *feare*, and other like *affections* : it is in some such case as this, and serverth against those which would usurpe, and take to themselves the *knowledge* and *invention*, wherewith *God* hath denied to indue them.

Therefore were it not for the common good, and the great affection that every one ought to beare to his Countrey: it would appeare more commendable in wise men to conceale their studies, making their *Funerals* in their owne *bosomes* ( whence they had their first *births* ) rather then to expose them to the publicke, where *vertuous studies* are too often cruciated, by the *darts* of *envy*, which *malignant spirits*, too frequently prove upon them. Notwithstanding I will not altogether discourage my selfe, although I know by sufficient tryall, that *Cynicks* will barke at those they know not : and others of as bad a nature, will accompany their *clamours*. For so it is with the inconsiderate multitude, who wanting that *vertue*, which wee call *honesty*, and that *speciall grace* which we call *Charity* : condemne without *hearing*, and wound without any offence given. This I can speake with *pitty* to my selfe, as having too frequent and familiar *experience* thereof. But of these *Natures*, that lye as it were in \* *ambush*, to carpe and find fault ; indeavouring to wrest good intentions, to their evill constructions : seeing the *wise man* complained of such long since, and that *Nature* hath not beene wanting, to thrust off

\* Ecclesi. 11.  
31.



off the same *brood* daily into the world, as bad, and perhaps more malicious: I will leave them to their easie wayes of reprehension, then which, there is nothing of more facilitie, and returne to the woike of this Chapter.

Having often considered the *danger of the Muskettier*, and how unable he is to resist the Horse, after he hath poured forth his *shotte*, without he be sheltered, either by some *naturall or artificiall defence*; And withall having knowledge, that in severall parts of *Christendome* divers *Captaines and Souldiers*, have oft beene trying conclusions, to make the Muskettier as well *defensive as offensive*. Some by *unscrewing the heads of their Rests*, and then *screwing the staffe of their Rests into the muzzle of the Musket*, with the *arming of a Pike, at the lower end*, by which meanes they would use the Musket and Rest together, in the nature of a *whole Pike*. But this proved so tedious and troublesome, that it fell without profit. Another sort had made *Rests* with the one end of the *forke (or head)* being like a *spike*, about 18. inches in length: this also proved extreame troublesome to themselves, *dangerous to their fellowes*, and of no *validity* against the *emie*. A third sort had *halfe-pikes*, of about 7 or 8 foot in length, using it after the manner of a *Rest*: but all the while the *Muskettier was charging* (his Musket) one of them was enough to trouble a *whole file*, besides the danger in the *recovery*. A fourth sort there was (yet better then the former) that with a *hooke was fastned to the girdle, the while the Muskettier was making ready*: but this had his defects also,

as

Master Iohn  
Davies of  
Blackefriers.

as being both *tedious* and *troublesome*. Many other wayes and conclusions, have also beene tryed; with *success* like the *former* : which I forbear to demonstrate, for as their conceits proved uselesse, so the discourse would prove as fruitlesse. Lastly, my *selfe*, with another \* *Gentleman* of our *ground* (both well affecting the use of the Musket) found out a way, to use the *halfe-pike* and *Musket*, with so much *facilitie* and *ease*, that it is *farre lesse troublesome* then the *Rest* : and yet of a *greater length*, then any of the former *Rests*, or *Halfe-pikes* ; as being compleat 10 foot in length, with the *arming*.

All the former *devices*, if they could have beene brought to any *maturitie* : yet would have falne farre short of this, for the *triple use* thereof. As being a *Rest*, if there be no farther occasion; As being a *pallisado* (if there be occasion) to *defend the Muskettier from the Horse*; As being a *Halfe-pike* to use in *Trenches*; As also when our *shotte* have poured out a great *volly* or *showre* of *Lead* on the *adverse Muskettiers*, they may then *nimbly* with their *halfe-pikes*, fall in amongst them. And lastly for the *pursuite* of an *enemy*, it being of all others, the *best weapon*.

\* Muskettiers  
with halfe-  
pikes fittest  
for to be sent  
in parties.

If a *party* of Muskettiers, were to be sent out; those using the *halfe-pike*, of all others are the fittest, for that they are able to *offend their enemies*, and best able to *defend themselves*. If after they have given fire, they should bee *overtaken* before they have *made ready againe*, and *charged by the Horse*; Yet they are able to *defend themselves*, with their *halfe-pikes*, even in the time they are *charging* : for  
the

the *Front halfe-files* may couch with their *halfe-pikes* charged brest-high, and swords drawne, and keepe off the Horse: whilst the *Reere halfe-files* give fire over them, whereby they will bee sufficiently able, to defend themselves, and annoy their enemies. In a word, the *halfe-pike and Musket* for them that know how to manage it, is of so excellent use, that the worth thereof cannot, nor ought not to bee confined to the poore demonstration of an unskillfull Writer, that will not take the libertie of a Hen to keckle over her owne egge: but leave it to the wide world to vindicate its owne reputation. Therefore now let us come somewhat neerer, and examine what queries, or objections have beene made against it; and you shall find these ten following, viz.

1. *Whether Muskettiers with halfe-pikes being to encounter against whole Pikemen and Muskettiers with Rests (seeing there hath been no tryall) whether Armes in reason would have the advantage.*
2. *Whether the Musket and halfe-pike be as serviceable against Horse, as the Muskettier with the Rest and whole Pikes.*
3. *Whether the Musket and Halfe-pike, can as conveniently be used in all respects as the Musket and Rest.*
4. *Whether the Musket and Pike bee usefull in Trenches and Fortifications.*
5. *Whether the Muskets with Halfe-pikes can be used in Woods, where ambushments are usually laid, if not, where those halfe-pikes are to be bestowed.*

Z

6. Whe-



6. *Whether the charge wherein the halfe-pike exceeds the Rest will be counterwailed by the services it hath beyond the Rest.*
7. *Whether in Company or Regiment it be convenient, and necessary, to have whole Pikes, or no.*
8. *Whether Pall: sadoes or swines feathers, bee as serviceable against the Horse, as the Halfe-pike.*
9. *Whether if all these queries and objections have a satisfactory answer, it be necessary or convenient, that the use of the Halfe-pike and Musket be known, before we have publick occasion for service.*
10. *Whether the waight of the Halfe-pike, by which it exceedeth the Rest, be not more troublesome counterpoysing all the benefits it hath before the Rest.*

These *Queries* have beene urged by men not of the meanest *Ranke*, nor *skill*, but even of such whose *opinions* were very *considerable*, and whose *judgements* could not *easily be mis-led*; unto which they received such satisfactory answers, as you may further peruse in the Chapter following.

## CHAP. CXII.

*The Ten Queries objected to the Musket and Halfe-pike fully answered. The Halfe-pike joyned with the Musket approved to be very usefull, as having received approbation from divers Soldiers of great Ranke and qualitie.*

**H**AVING in the last Chapter shewed the queries objected to the *Halfe-pikes* and *Musket*; Come wee now without preamble, to give an answer to each of them successively. To the first we say, That \* *Muskettiers with halfe-pikes* have the oddes, against *Muskettiers with Rests* and *whole Pikes*, for these and such like reasons; for presuppose what number you please, the one halfe *whole Pikes*, the other halfe *Muskettiers and Rests*. The fight being begun at *distance* (as must needs bee conceived) the *halfe-pike-men* poure on a great deale more *shotte*, at least *three to one*: by which meanes the adverse part must needs be *broken and spoyled*, before they can possibly come up to the *push of pike*. Secondly, they that escape death and wounds, if their hearts serve them to come up to the *push*, will bee so *wearie, windlesse*, and out of *order* with their *hast*, that they will not be able to stand against their *Adversaries*, who *keeping their ground*, will neither be *wearie nor out of order*. Thirdly, the *Muskettiers* that come up *a-brest*, even with their *pikes*, will with them be sufferers of the like inconveniences: and

\* To the first.

now being come to *close fight*, are not possibly able with their *Rests*, to withstand the *better armed halfe-pike-man*. Fourthly, if there were any reasonable portion of *whole Pikes* joyned with the *Halfe-pikes and Muskets*; the advantage then would bee unquestionable.

To the second we say, That \* *Muskettiers with Halfe-pikes, instead of Rests*, are more serviceable against *Horse*, then *whole Pikes, and Muskettiers with Rests*, for these reasons: First, *whole Pikes alone are too weake*, because the *horseman* carries *firie weapons*, and can *kill the Pike-man at distance*, they neither being able to *defend themselves*, nor *offend their enemies*. Secondly, *Muskettiers with rests*, are not able in open *Campania*, to withstand the *able and resolute horse-men*; which will *breake* them through, and through. Thirdly, both conjoyned in one *body* are too *weake* in open, and even *Countreys* to withstand the *Horse*: for if your *Pikes* bee *flanked with Muskettiers* (according to the usuall manner) then the *Horsemen* kill the *Pikes* at distance (as aforesaid) and *route*, and *plunder* the *Muskettiers on the flankes*, they having little possibility of *aide* from their *Pikemen*, when the *horse* are entred *pell mell*, amongst the *Muskettiers*, *knocking and treading* them downe. Fourthly, if they draw into any other *forme of impalement*, then one arme becomes a trouble to the other, neither being able to performe their *due execution*. Fifthly, *Muskettiers with halfe-pikes*, are able in any *forme, or figure* of *battell*, to defend themselves from being *broken* by the *horse*: and by so much, as their *firie weapon* doth exceed the *horse-mans*



*mans in execution*; by so much they will bee too strong for him in the *open field*: and farre more in a *streight*, or place of *advantage*; where either *Nature* or *Art* hath secured the *flankes*.

To the third we say, that the *Halfe-pike* joyned with the *Musket*; may as conveniently in all respects be used for *ease*, and indeed is more accommodable then the *Rest*: being more *expedite* for *execution*, and farre more *safe* for *defence*.

To the fourth we say, that the *Rest* is of no use in *Trenches* and *Fortifications*, where men present upon a *breſt-worke* or *parrapet*: the *halfe-pike* in such cases may be *usefull*; as when it happens they come to *close fight*, where it proves *advantageous*.

To the fift wee say, neither *Rests* nor *Halfe-pikes* are necessary or *usefull* for the *Muskettier* to carry, in a *wood* and *thickets*: whether it bee to lay *ambushments*, or to the contrary, to *search them out*, and *beat them off*. Yet in such cases they are farre more *usefull* then *whole Pikes*, being more easily managed. Nevertheſſe if it be in great *timber-wood* and *Forreſts*, there the *halfe-pike* may prove *usefull and portable*. But if it shall bee found inconvenient for such *service*; then they are to be disposed in the *Carts*, *Waggon*s, or else-where, as opportunity shall be offered.

To the sixt we say, that the *service* considered of the *halfe-pike*, the charge of it above the *Rest*, is not considerable: for a *serviceable halfe-pike*, may be had for two shillings sixe pence, which exceeds not much the price of a *Rest*. Further, when it shall appeare, that the *Halfe-pike* and *Musket* will prove

more *advantagious* to our Nation in case of *invasion*, then it can be to any *enemie invading* : then it may be presumed, were the charge farre greater then it is, yet it ought not to be neglected.

To the seventh we say, that *whole Pikes* by no meanes are to bee left or neglected, because for some *services* they are especially *usefull* : notwithstanding  $\frac{1}{3}$  or  $\frac{1}{4}$  part at the most is sufficient, either for *Company* or *Regiment* ; for the *Muskettiers* are easily transferred into *pikemen*, by changing of their *Armes* when occasion requireth ; But the *pikeman* cannot so soone, nor so easily bee made a *Muskettier* : when the suddennesse of the occasion, or the quality of the warres shall require it.

To the eighth we say, that *halfe-pikes* are equally *usefull*, and *serviceable* against the Horse or the *Pallisado*, when in the same kind they are used, viz. being strucke or fastned into the ground ; and hath these advantages above the *Pallisado*. First, the *Pallisado* is alwayes troublesome to the *Muskettier* in the carrying, being never helpfull in the *march* ; But the *halfe-pike* like the *rest* ( and better ) affordeth much ease to him that carrieth it without trouble. Secondly, the *Muskettier* while hee carrieth his *pallisado* in his hand, cannot give fire upon occasion ; but the *halfe-pike* is then as *usefull* as the *Rest*. Thirdly, there can no use bee made of the *pallisado* against foot. But the *halfe-pike*, is then a *serviceable weapon*, and indeed is not only *halfe-pike*, but also hath all the accommodations, both of *Rest* and *Pallisado*.

To the ninth wee say, because *England* is ill furnished

nished with Horse, the benefit of the *halfe-pike*, in defending the charge of invading horse, is more necessary for us to *imbrace*, then for others: and therefore it ought by us generally to be practised.

To the tenth wee say, that which hath beene already delivered, and continuall practice will make manifest; First, that the *weight the halfe-pike* hath above the *rest*, is doubly recompenced by other benefits. Secondly, Experience makes it appeare, that the *weight*, though it be more then of the *Rest*; yet it is no wayes more troublesome.

Let me adde one benefit more of the *halfe-pike*, although it concerne none of the queries. The Muskettier, whether he use *Rest* or *Halfe-pike*, can doe no execution at any great distance; if hee want powder, match, or bullet, the which often are in the one or other found defective; then the *Halfe-pike* is usefull. Secondly, grant the Muskettiers to bee well accommodated with six *Armes*, and well fitted with good Powder, Match, and Bullet: yet sometimes the extremity of weather, even in the joyning of the Battell, may make the fiery weapon of no use, by excesse of haile, snow, or raine, or the like: But then shall the *Halfe-pike* have great advantage above the *Rests*, it then being a serviceable weapon, either offensive or defensive.

Now although this might suffice to give satisfaction to any rationall men: yet besides this, it hath had the approbation of many of the Better sort of Souldiers, that have seene the use thereof. As Sir Thomas Glenham Collonell, a Gentleman of as sereene a judgement, and as great a lover of *Armes*, as any



I know in the *whole kingdome*. As also *Lieutenant Collonell Chamberlayn*, an approved *Sauldier* in most of the *German Warres*, the which have beene in our time; who tooke such an especiall liking to it, that hee caused a *Swedish youth* that attended him, to learne the *use thereof*, and two of *his Serjeants*. Many others both of *skill*, and *quality*, that have seene it *practised*, have also given their *approbation* unto it. But I would not be *tedious*, therefore take this one for all, the which may serve to stop the mouthes of the most malicious: it is a Letter sent by the Lord Viscount **WIMBALDON**, to the President, and *Gentlemen of the Artillery Garden London* the third of March 1637. The Copie of which Letter I have *inserted verbatim*, as followeth.

The

*The use of the halfe Pike and  
Musket together..*

**W**Hereas the Halfe-pike and Musket being practised by some Gentlemen using Armes in the Artillery Garden, which are Armes both offensive and defensive; And after consideration of them, being desired to give my opinion of their usefulness. These are to certifie, that having well considered of the usefulness of the Invention, my judgement is, that these Armes may prove very serviceable, and advantageous to the defence of the kingdome, and therefore I hold it fit, that they should be practised for these reasons following;

First, that in regard that the greatest danger of this Kingdome doth consist in being surprized: and that there is nothing can defend a Landing place better, then Horse with Muskettiers behind them; So I hold the Halfe-pike the more serviceable, for that the Horse shall carry both offence and defence by those Armes, and in farre shorter time come to the Landing place then any Foote, the Horse marching further in a day, then the Foot in three.

Secondly, they are better then single Muskettiers to force a Quarter, being mounted up behind Horsemen.

Thirdly, they are good in Trenches, for they will bee able to defend themselves with their Halfe-

Halfe-pikes, after they have discharged their Muskets, for want of which, the single Muskettier is forced to retire, to a great confusion, and hindring those that are behind them.

Fourthly and above all things in skirmishes, when no Pykes are able to defend them, they are able to defend themselves, and when they doe retire, as ordinarily they doe behind the Reere of the Pikes, being forced by a stronger Enemie, they are able to gall the Enemie upon the Flankes, and doe great service without danger.

Fiftly, in narrow straites and passages, they can defend and offend more then any Pikes or Muskettiers; For where Pikes and Muskettiers cannot serve, they will doe double service with single bodies.

For these and some other reasons, I approve of the exercise of them in your severall meetings, and doe thinke it fit, that all such practitioners of these Armes (which I could wish were more) bee not interrupted nor hindred in the use of them, but may receive good encouragements for the better prosecution, and finding out the compleate use and perfection of them; And that the Captaine and other Commanders of the Company, at their severall times of exercising, constantly put in practice the said Armes, which I doubt not, but will bee found very advantagious to his Majesties service.

*Cecill house  
Martij 3 1637.*

WIMBALDON.



## CHAP. CXIII.

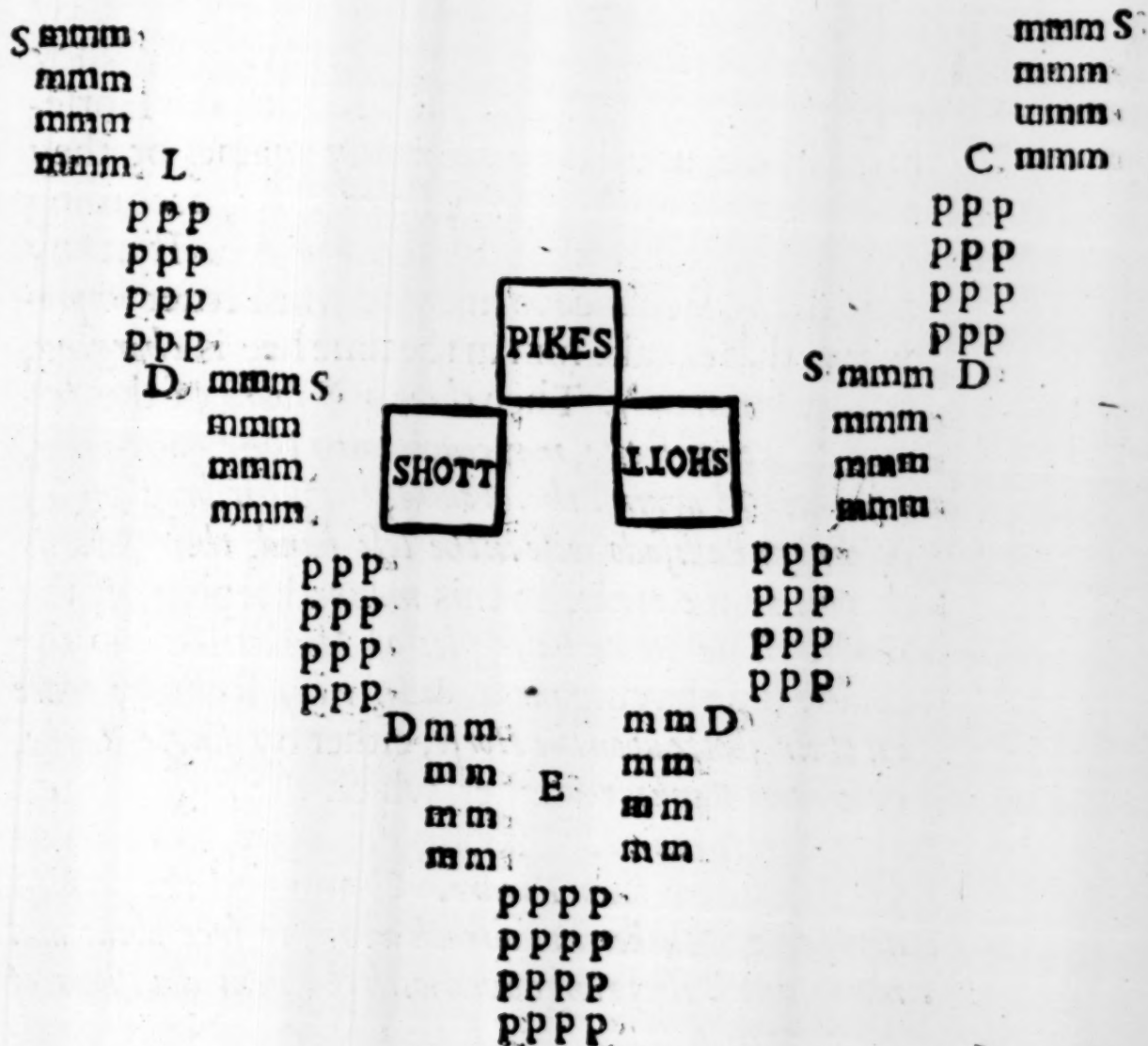
*Of the Halfe-pike, how it may be serviceable on all formes: with severall figures, indifferently usefull to Halfe-pike or Rest.*

**T**He *Musket and Halfe-pike*, having thus vindicated its reputation, it were needlesse to speake further to it: although much more might be said to good purpose, in the further *Approbation* thereof. Neverthelessse being that as yet, it hath not been seene by his *Majestie*, and his *Councell of Warre*; and till then it can receive no generall allowance; the *use* thereof for the present, being onely for *voluntary Compaines*, and such other *Gentlemen*, that practice the experiment for the good of the *Kingdome*; Therefore I must intreat such loving friends to hold me excused, that I doe not here enlarge my selfe in discoursing the *postures, motions, and figures* most proper for the *Halfe-pike and Musket*: seeing I hope it will not be long before the *use* thereof be *Com-manded by Authority*, and then God willing, I will write something for the *Musket and halfe-pike* by it selfe. Neverthelessse, in the meane time for matter of *firings, formes, and figures of Battell*; there is none in all the booke, but is *usefull*, one way or other, for the *Halfe-pike*: either in the way of a *Rest*, of a *halfe-pike*, or of a *Pallifado*, and so may be *used* accordingly; but I have too long held you in discourse, proceed wee now, to demonstrate some more

more formes, the which may be *indifferently usefull*, either for *Halfe-pikes or Rests, &c.* First Command, *Wheele your Flankes into the Front*, and then *face all as before*, this brings all the Muskettiers in the Front. Secondly, command the *four innermost files* (as well Muskets as Pikes) to *stand*, the rest of the body to *face to the Right and left*, and *move untill there bee intervalls made sufficient to receive the Muskettiers of the standing part*, then *stand*, and *face as before*. Thirdly, command the *three outermost files of each Flanke to move*, and *leave Intervalls as aforesaid*. Fourthly, command the *Middle division stand*, the other divisions *move forwards, till their Reere be advanced even with the Front Angle of the standing part*. Fifthly, command the *two outmost divisions move forwards, placing their Reere as aforesaid*. Lastly, command the Muskettiers to *face outward, and move cleere of their whole Pikes*, then *face as before*, and *ground their Halfe-pikes* as in the following Figure.

Front.

Front.



When this figure is drawne, if your Muskettiers be Rest-men, then they may fire, and fall in the Reere of their owne divisions. Secondly, they may give fire, and flanke their Pikes. Thirdly, they may give fire and place themselves in the Reere of their Pikes, &c. If your Shotte be Muskettiers with halfe-pikes; Then if there be any feare of the Horse, cause them

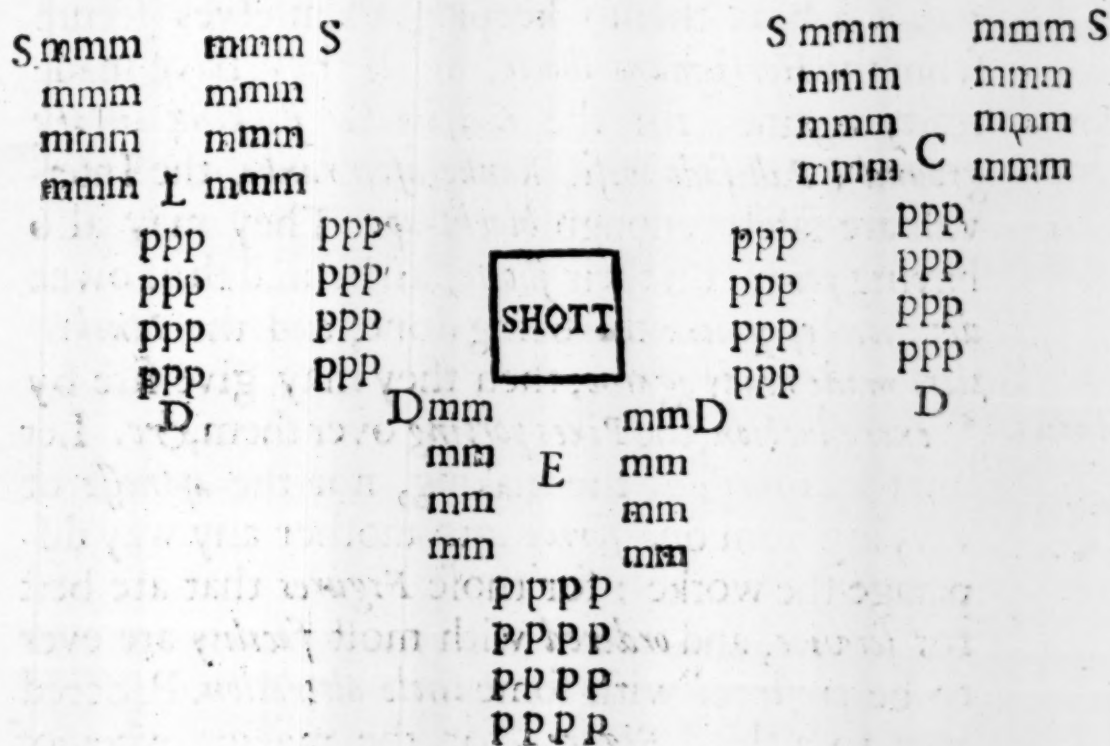


\* Four  
Rankes of  
halfe-pikes in  
this manner  
charged, are  
stronger then  
six Rankes of  
whole pikes  
charged over-  
hand.

them to *ground* their *halfe-pikes*, in the *forme* they now stand: the which being performed, they may *give fire* at discretion, either by *single Rankes*, by *two*, *three*, or *four* Rankes together: having *fired* they may either *face about*, and move out of the Horse-mans *shotte*, untill they are ready againe, or they may place themselves *behind their Pikes*, according to the former directions for the *Rest*, &c. If at any time the *horse* chance to find the Muskettier *unprovided*; that is, take him in the time hee is *charging*, before he is ready. Then *three* or \* *four* of the *former Rankes of shotte*, may *couch with their halfe-pikes*, (*the one end against the ground, the other brest-high*) *holding it Pallisado-wise in the left hand, their Swords drawne in the right*, in this manner keeping off the *Horse*. The *Reere halfe-files of Muskettiers*; in the meane time having *made ready*, may securely *pour* out their *shotte upon the Horse*, either by *single Ranke*, or by *two Rankes* together, which the *horse* are not able long to *indure*. Having *given fire* so often as you please on this *Figure*. Command the *formost division of Muskettiers on each wing*, to *face about* and move, untill they range even with the next divisions of *Muskets* then stand, and face as before. Next command the two *formost divisions of Pikes* face about, and move untill their *Front range* even with the *Reere Angles of the two Front-divisions of Muskettiers*, then face as before; and it produceth this following figure.

Front

Front.



When you have well perused this *Figure*, you will perceive that each *Battell*, *Manniple*, or *division*, stands well *ordered* and prepared for *fight*; if any *part* happen to be *distressed*, the other may readily move *forwards* to their *Reliefe*; or they *Retreite* without *incumbring* one another; for the *wayes* to give *fire* on this *forme*, there are so many, that it were pitty to discribe any: for they may *fire*, *advancing*, *standing*, or *retreiting*. They may also give *fire* and keepe their *figure*, the Muskettiers moving forwards, and *maintaining the same ground*; *flanking their pikes*, or *falling in the Reere of the pikes*. If your *shotte* be *halfe pike-men*, then they may doe all *this and more*: for after that they have *grounded their halfe-pikes*.

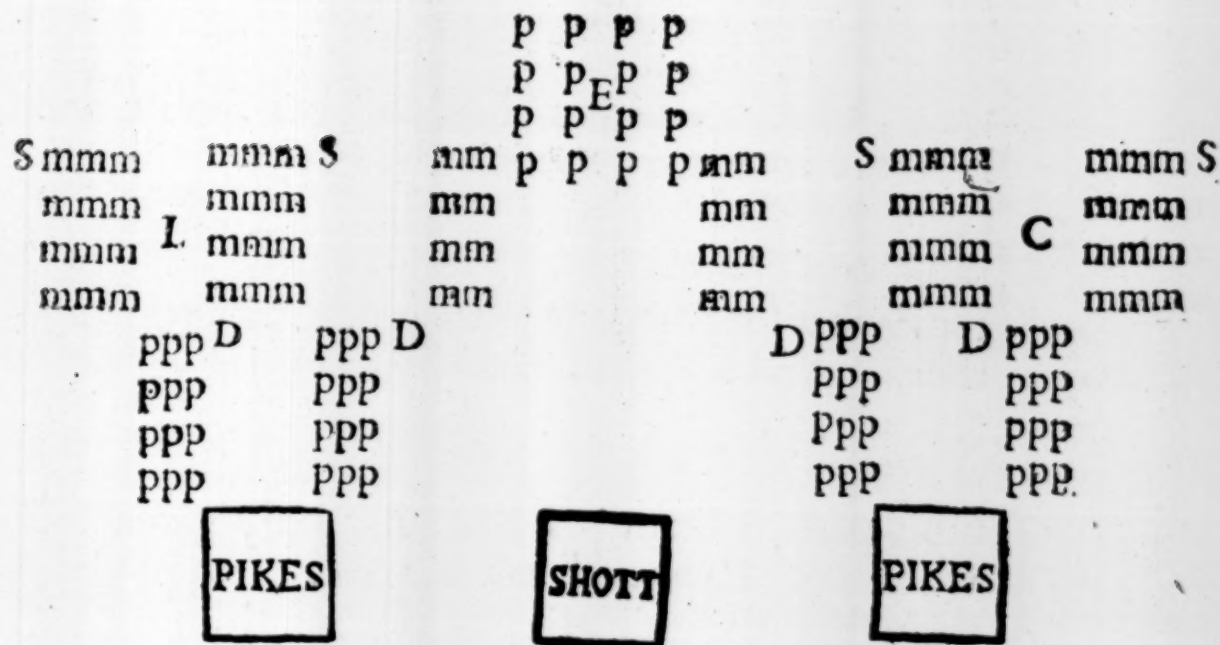
*halfe-pikes* (if there be any such need) they may give fire, and *Retreite* by *passing downe into the Intervals* (behind them) keeping themselves secure from the *Horse-mans shotte*, untill they have made ready againe; for the *Halfe-pikes sticking in the ground* (*Pallisado-wise*, *Ranke after ranke*, the *Intervals* are safely enough *blockt-up*. They may also having *poured on their shotte*, fall behind their owne *divisions of pikes*: this being done, and the *Muskettiers made ready againe*, then they may give fire by \* *extraduction*, the *Pikes porting over them*, &c. Let not the *easinesse* of the making, nor the *aptnesse* of varying from one *forme* into another any way *disparage the worke*: for those *Figures* that are best for *service*, and *ordered* with most *facility* are ever to be *preferred* with some little *alteration*. Proceed wee to a third *Figure*; for the making whereof command the two *Reere-divisions of Muskettiers*, to *move forwards*, and *Range even<sup>o</sup> a-brest* with the *other divisions of Muskettiers*. Secondly, command the *Reere-division* (for *Battell*) of *Pikes* to *move forwards*, untill the *Reere Range even* with the *Muskettiers*, that moved last before them. The *Figure* followeth.

\* Of *extraduction* look  
backe into  
chap. 80.

*Front.*



Front.



Concerning *firings*, what hath beene said of the former *Figures*, may in like manner be performed on this: therefore not to spend more time about it, we will come to the *Reducement*. And to that purpose first command the *Front-division of Pikes* face about, and move even with the other divisions of Pikes, then stand, and face as before. Secondly, command all the divisions (as well Muskettiers as Pikes) to face to the Right and left inward, and to close together into one body; This done, next command them, wheele their Reere into the midst (or flankes into the Reere.) Lastly, all being faced to the proper front, they are Reduced as at first. I might have further enlarged my selfe upon this subject of *firings*, and figures of Battell, and have shewed variety enough, of

of formes, either Regimentall, or for private and single Companies, as Trine Battells, Round Battells, the Crosse and Round in one, the Solliid square impaled, with infinite others; But I have advanced farther already, then I at first intended, though well I hope no further then will bee freely, and lovingly accepted; Which if it bee, I shall conceive my felfe to have received a gratefull and most ample satisfaction. The hope whereof doth somewhat incourage mee to proceed a little further. And as I have already shewed divers and severall motions; with a large addition of formes, and figures of Battell: Yea, and in all (or the most part of them) I have not only given the words of Command and direction, to produce them from the ordinarie Square; but also together with the demonstration of the Figure, and direction for the firing; I have in like manner given them proper Directions for their Reducements againe. So now for the satisfaction of some of the quainter sort of Souldiers give me leave to adde one Figure unto another, untill that by firings I Reduce firings. For the performance whereof that I may observe some method, I will digest them into the way of exercise, &c.

Neverthelesse, before I come to that, give mee leave in one word to satisfie many, whose importunitie would have prest mee, to have writ something, for the Exercise of the Cavalry. For my owne part, I should thinke it a great deale of labour spent to little purpose therein: seeing such Gentlemen that are desirous of information that way,

way, may buy that excellent Booke intituled *Military Instructions for the Cavalry*. Set forth by that Worthy, and well-knowing Gentleman, Capitaine *John Cruso* of *Norwich*. Wherein the meanest *Cavalier* may gaine knowledge : and the best may review, and supervise the Idea of his owne experiments.

---

\* 2 CHAP.





## CHAP. CIX.

*The first dayes Exercise.*

\* It is very necessary, still, so often as time will permit; to instruct the Souldiers, in the postures, and the well handling of their *Armes*.

\* Each file-leader to lead up his file upon the first Summons of the Drum.

\* Ever to observe to be even in Ranke, and strait in file, and stand at the true distance.

\* Fetching the Ensigne to the head of the Company.

\* Souldiers ought to be very silent,

**H**AVING brought your *Company* into a place convenient, where you intend to exercise them; if you have time enough, you may cause the *File-leaders*, *Corporals*, or *Serjeants*, to instruct them in the \* *Postures* and *true using* of their *Armes*. Wherein having spent sometime, to the benefit of the *Company*; upon the \* *summons* of the *Drum*, each *file-leader* with his *file*, is to *march* into his place. The *Captaine* (or other *Commander*) being at the head of his *Company*, commands them to *even their rankes*, and to *straiten their files*, and *stand to their order both in ranke and file*. \* If your *Ensigne* be not already in the *field*; but in some place neere at hand; then cause your two *innermost files* of *Pikes* to advance: commanding a *Serjeant* with a *Drum*, to *troope* them along to the place of *Rendezvous*, there to fetch their *Colours*. If the place bee not nigh at hand, take as many *files* of *Muskettiers*. Having brought the *Ensigne* to the head of the *Pikes*, each *file* returns into his place; the *Officers* likewise withdrawing to their severall *stations*. \* Silence being commanded, the *Captaine* (or other *Commander*) begins

begins \* first to instruct the *Souldiers* in the severall *distances*, betwixt *ranke* and *file*, with the wayes to *open* and *close* to them. And if he thinke fit, to instruct them in the severall *uses* of each *distance*.

Next after *distance*, they are to be instructed in the † *facings*, then in the *doublings*; next, in the *Counter marches*; and lastly, in *wheeling*. In each of which they are to bee instructed, according to the opportunitie of the time and place: but, especially the capacitie of the *Souldier* is to be observed. Wherein, the *Captaine* may doe very well, in each of the *motions* to lay downe some speciall *rules* and *observations*; by which the *Souldier* may the better understand what he is to doe, and how (the best way) to performe it.

\* After the *motions* ended, let them prepare for *skirmish*. And first you may cause them to give fire with *forlorne files*, marching forth twenty *paces* (or thereabouts) before the *front*. Having all fired over that way, they may give fire once over, by advancing two *rankes* together, ten *paces* before the *front*. Then let them give fire, even with the *front*, and then with the *halfe-files*: the *Pikes* porting or charging, according to discretion. The *Pikes* being advanced, and the *Muskettiers* marched up, even with their *front*; you may either \* *face about*, *whee about*, or *Counter march*, and so give fire in the *reere*. Your *Pikes* then being *shouldered*. After your *Muskettiers* having fired over in the *reere*, you may (if you please) \* *whee*le your *flankes* into the *front*, and march if any enemy be neere, is very dangerous. Wheele your *flankes* into the *Front*, if your *Souldiers* have time enough, or otherwise face to the *Reere*, & charge *pikes*.

\* First, the souldiers ought to have their due distance given them, with directions how most properly to performe.

\* *Facings*, *Doublings*, *Counter marches*, & *Wheelings* wherein the *Souldier* ought treatably to bee instructed: the *Commander* alwaies observing, what his *Souldiers* are he hath to deale withal, and to give his directions accordingly.

Never striving to put more into the bottle then it can conveniently hold.

\* Observe to march between each firing, & upon each figure, that may be convenient.

\* *Face about*, or *whee about*; for to counter-



so *charge* Pikes to the *reere*. Which done, *wheele* your *front* into the *midst*; passe into your *place*, and *face* them to you. Then (if you will) you may passe your Muskettiers of the *left flanke*, through betweene the *rankes* of Pikes, and place them next to the *right flanke* of Pikes, opening the *right flanke* of Muskettiers, to give them way. Then let the

\* When the pikes shoulder the Muskettiers must observe to *rank* even with them.

\* Upon this firing, advance pikes when there is but one file of Muskettiers to give fire, and close forwards to the distance of order.

\* These kind of *Intervals*, ought to contain six foot in distance, upon some other occasions, 12. foot is necessary.

\* Pikes *shoulder*, and Muskettiers give fire to the *right*, upon a *march*: their *leaders* leading them up betweene the Pikes and their owne *divisions* of Muskettiers. Having *fired once over*, in this way, let them continue their *firing* to the *right*, each *leader* leading up his *file* on the *outside* of the *left flanke* of Pikes. Then \* let the Pikes *advance*, even whilest the last *file* is *giving* of *fire*: and so soon as the Pikes are cleere of the Muskettiers, let them *face* all to the *right*, and *charge*. Having *advanced* your Pikes, and *faced* your *body* againe to the *left*, you may then *wheele* your *Battell* about to the *right*, and then *facing* the *whole body* to the *left*, the Muskettiers will be all in *front*. Then let your Muskettiers give *fire*, and *wheele* all off to the *right*, the *officers* to that end making \* an *Intervall* for the *left flanke*, or else let them *wheele off* by *division*, placing themselves in the *reere* of their owne *divisions* of Muskettiers. Having *given fire once* (or oftner) over that way, let them *give fire* againe, and *wheele off* by *division*: *ranking even* with their Pikes. That being done, cause the Pikes to *charge*: the Muskettiers *giving fire once over*, on that figure. The Pikes being *advanced*, *face* the *whole body* to the *right*: and cause the Muskettiers to *stand*, and the Pikes to *open* to the



the *right* and *left*, and so to make the *hollow square*. Then you may (if you please) command the *Ensigne* to display his *Colours* in the *midst* of the *hollow*; in signe of *triumph*, the *body* either *standing* or *marching*. After which, command † the *Pikes* to *close their divisions*: Which being performed, command the *reere division* of *Muskettiers*, to double their *front* of *Pikes*, by *division*: and then they will stand in forme of *Captaine Wallers Triple firing*: Let them *give fire* upon that *Figure*, and *fall off* againe, according to the *directions* upon that *Figure*. Which being performed, and the *Pikes charged*, and *re-advanced*, the *body* will be absolutely *reduced*, as at the first it was before you began your *firings*. These *firings*, may (with the *motions*) be sufficient for the *first dayes Exercise*. Wherefore, for this time, we will lodge our *Colours*: untill by the *summons* of the *Drum*, we are called forth to the *second dayes practice*.

The hallow Square, with Muskets in Front and Reere, pikes on the flanks.

Captain Wallers firing, as in cap. 93.



## CHAP. CXV.

*The second dayes Exercise.*



Silence.

Vpon all motions be sure that the Souldiers stand even in ranke and file.

Good words more available than blowes, or ill language.

Aving brought your Souldiers the second time into the field, the body being drawne up into the ordinary square, and every Officer vigilant in his place: the Capitaine commandeth silence, with some other generall termes of observation, both for the leaders and right-hand-men. Having thus commanded them (as before) to even their ranks, and to straiten their files: he proceeds to shew (as formerly) the distances, the facings, the doublings, the Countermarches, and the wheelings: therewithall instructing them either in all, or so many of them, as the time will permit, and hee thinkes convenient. Ever (by the way) observing that in the Proverbe, *A thing once well done, is twice done.* That Commander, that exerciseth his Souldiers with good language, and with solid reasons; shall make

make them better *proficients* then hee that shall use *rigid termes*, and *rough hands*. After the *postures*, *distances*, and *severall motions*; that which next followes for this *dayes exercise*, are *firings* and *figures* of *Battell*. So soone, therefore, as the *Drum* begins to *beat a preparative*, the Muskettiers are to begin to *make ready*.

The Muskettiers make ready to give fire.

And first, you may cause them to *give fire* on the \* *Horne Battell*, still *marching up* into their *leaders ground*: by that meanes preserving their *Figure*.

\* *Horne Battell*, as in chap. 75.

Secondly, let the Muskettiers *close* their *divisions* before their *Pikes*, and then *give fire* upon the *demie-Hearse-Battell*: *falling off* presently, either all to the *right*, (the one halfe *passing* downe an *Intervalle*) or to the *right* and *left* by *division*; and *placing themselves* in the *reere* of their *owne divisions* of Muskettiers.

\* *Demie Harse*, as in chap. 76. Between each firing, cause your body to march either in forme of *Battalia*, extended in length: or upon any other figure, so that it may conveniently be done without disorder.

The third time of their *firing*, let them *wheele off* by *division*, and *flanke* their *Pikes*: and when they have *fired over* that way, let the *Pikes charge*.

For the fourth *firing*, let them *give fire even* with the *front* of *Pikes*, *wheeling off* to the *right* and *left*, and *placing themselves* in the *reere* of their *owne divisions*.

Then let them *fire even* with the *halfe-files wheeling off* by *division*, and *placing themselves* in the *reere* of the *Pikes*. The *Pikes* (you are to understand) ought to *charge* all the time of



of the last *firing*: who being *advanced*, *wheele* your *Battell* about to the *right*, or *left*.

A firing in  
the Reere.

Then, your Muskettiers being in the *reere* of your Pikes, let your sixt firing bee to the *reere*: the Muskettiers *wheeling off* by *division*, and *placing* themselves before the *Front* of their *owne divisions* of Muskettiers, next *behind* the *reere* of Pikes. Having fired *once over*, that way, let them give fire over againe, and *flanke their Pikes*: which being in like manner performed, Command them to *wheele* their *flankes* into the *front*, and then *face* to the *reere*, and *charge* Pikes, at the *inside* of the *right foot*, with their *swords drawne* in their *right hands*.

\* In stead of  
giving fire o-  
ver their  
pikemen, they  
may give fire  
by extradu-  
ction, as in  
chap. 80.

Let the seventh *firing* bee discharged \* *over* their *Pikemen*, *wheeling*, either all off, to the *right* through *Intervals*, or else by *division*, and *placing* themselves in the *reere* of their *owne files*. Otherwise, (for want of roome) the *first ranke* of *Muskettiers*, having *given fire*, let them *kneele*, or *crouch* low upon the ground: and make ready againe; the second *ranke*, in like manner, *firing* and *kneeling*: and so for the rest. Having all *fired once over*, in that manner, let the Pikes *advance*, and put up their *swords*: the *Muskettiers*, in like manner, are to *rise*, then to *even* their *rankes*, and *streiten* their *files*.

For the eighth *firing*, you may *face* the *body* to the *reere* (or if you will continue your firing the

the same way ) then *wheele* your battell about, and having opened your *Intervals*, your forme will be the \* *broad fronted Phalange*, or *broad-fronted Battell*. Let these give fire, the first time, falling (or *wheeling*) all off to the right, and placing themselves in the *reere* of the pikes, of their owne divisions of Muskettiers. The second time of firing, let them *wheele* all off to the right, (as before) and place themselves in the *reere* of the Pikes, which follow next after their owne divisions. In the interim of the last two rankes firing, cause your Pikes to port: but when the Muskettiers are cleared away, the Pikes may charge.

\* This Figure is most commonly called the broad-fronted Battell. But most properly the long-fronted Battell: for that the length; is the extension between flank and flank, this is in chap. 81.

When the pikes are advanced, and that they have closed their divisions, for the ninth firing, face them to one of the flanks, and *wheele* them into a *Semicircle* or \* *Convex halfe-moone*, where the Muskettiers being *outermost*, give fire upon that figure: the first time, falling behind the Muskettiers of their owne divisions: The second time of firing, cause them to place themselves behind their pikes. For further directions, looke backe upon the 79. Chapter, which discourseth of the *Convex halfe-moone*. The pikes may also charge, and the Muskettiers give fire over againe: according to discretion. The Pikes being readvanced, face the whole body to one of the flanks, and march them out hersewise. Then command them to double their rankes to the right: which being done, command that flank which are Muskettiers,

\* Convex halfe-moone, as in chap. 79.

kettiers, to *double the contrary flanke by division*: which being performed, all the Muskettiers will be in *front and reere*. Then cause the *reere-division* of Muskettiers to *double the front of Pikes, by division*.

Then let them *give fire* on that *figure*, as they may see further directions in the 93 Chapter. The pikes having *charged*, and *advanced* againe.

For the eleventh *firing*, first *face* the whole *body* to the *right*: then cause the *halfe-files* that then are, to *face* to the *reere*; and so let the Muskettiers *give fire* to the *front* and *reere*: *wheeling off by division*, and flanking their pikes. The Pikes may also *charge* to the *front* and *reere*, which being performed, *face* them all againe, to their  
\* leader.

\* The Leader is then conceived to stand on that part which was the Right flanke; the which was the front of the eleventh firing.

For the twelfth *firing*, make the *Plinthium* or *foure-fronted Battell*: the *Angels* whereof being filled with Muskettiers. For further *satisfaction*, looke upon Chapter 102. which gives *direction*, both for the *motion* and *reducing* thereof. Next *face* the whole *body* to that part which was the *front*, before the *last firing* began. Then, if you would have your *Ensigne* to *display*, in an *hollow Square*, cause your Muskettiers to *stand*, and *halfe-files* of Pikes, to *face* to the *Reere*: and so both *divisions* of Pikes to *march*, untill their *last rankes* are *even* with the *Front* and *Reere* of Muskettiers. Then *face* all to their *leader*. If you please, the Muskettiers may *give fire* upon this  
hollow



*hollow square*, as they *march*, to *both flanks* : still *leading up their files*, on the *inside* of their *owne divisions*, and this will make the 13. *firing*.

But by this time, our *powder* being *spent*, our *men* weary, and *night* approaching : We will come to *reducement*. Wherefore, first cause the *Pikes* to *close their divisions*, and the *Muskettiers* to *march up*, even with their *front of Pikes*. Then let the whole *body*, *wheele* their *flanks* into the *Reere*, which being done, all the *Muskettiers* will bee in the *Reere*. Then (if you will) *face* to the *Reere*, and *give fire*; causing your *Muskettiers* to *wheele off by division*, and to *flanke* their *Pikes*. Or else, cause your *Muskettiers* to *open* to the *right* and *left*; and *double* your *front of Pikes*, by *division*. Which being done, *double files* to the *left*; and they will bee all *reduced* as at first. Wherefore, wee will now *lodge our Colours*, and conclude our *second dayes Exercise*, &c.

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## CHAP. CXVI.

*The Third dayes Exercise.*

Whoſoever it be that teacheth the poſtures of the Muſket : ought to be very diligent, in his inſtruction, concerning the well managing of their armes: that they may not only fire to the Front, Reere and Flanke, but that they obſerve order in their motion, which will better their execution. The file-leader if he have time, may inſtruct his file in the diſtances, and the ſeverall motions.



Having the third time (as formerly) brought your *Souldiers* into the *Field*; it is very neceſſarie, in the firſt place, that they bee taught the *Poſtures* of each *Armes*: either by the *file-leaders*, or ſome other of the *Officers*. Wherein they muſt be carefull, to inſtruct them in the *firings*, both to *Front*, *Reere*, and *flankes*. As to give fire to the *front*, advancing; to give fire to the *front*, upon a *ſtand*: to give fire to the *Reere*, upon a *march*: to fire to either *flanke*, *marching* or *ſtanding*. As alſo to inſtruct them in *diſtances*, *facings*, *doublings*, *counter-marches*, and *wheelings*: that ſo, they may bee the more apt and capable, when they ſhall bee brought into a *body*. Having ſpent ſome time, in the *exerciſing* of *files*, let the *Drum* ſummon each *file-leader* to his place: the *Enſigne* be fetcht to the head of the *Company*; the *Captaine* command *ſilence*; and the *Souldiers* tender obedience. The *rankes* being *evened*, and the *files* *ſtreitened*, the *Captaine* (according to his accuſtomed manner) begins to inſtruct them in the *Diſtances* and *Motions*. And after the performance of ſo many of them, as hee ſhall thinke fit for the preſent *exerciſe*, he commands the *Drummes* to beat, and *Muskettiers* to make ready: and ſo cauſeth them

to

to give fire, \* three or foure severall wayes, after the ordinarie manner of *firing* in the *front*.

\* By drawing forth of loose files or otherwise.

Then cause your Muskettiers of the *left flanke*, to give fire to the *Reere*; and the Muskettiers of the *right flanke*, to give fire to the *right*. This *firing* is to be performed upon a *march*, the Pikes shouldered.

For the *second firing*, let them give fire to both *flankes*. The \* *gathering firing*.

\* The gathering firing, as in chap. 83.

For the *third*, let them fire to both *flankes*, drawing them up betweene the *divisions* of Muskettiers and Pikes.

For the *fourth firing*, let them give fire againe, to both *flankes*, leading them up after they have fired, betweene the \* *midst* of Pikes. When the last files are firing, advance your Pikes, and close your *rankes* forwards to their order. Then, *face* to the *right* and *left*, and *charge* Pikes. Your Pikes being *advanced*, and *faced* againe to the *front* proper: all your Muskettiers will be in the *midst*.

\* Drawing up the Muskettiers between the Pikes, as in chap. 87.

Then, open them some *Intervalles*; and let the *fift firing* be to the *front*, *wheeling* all off to the \* *right*, and *placing* themselves in the *reere* of their *owne divisions*. Then cause the Pikes to *charge*, and when your Pikes are *advanced* again, let your halfe-files *face* about to the *right*.

\* As in chap. 101.

And so the *sixth firing*, may be to the *front* and *reere*; the Muskettiers of the *front division*, *wheeling* off to the *right*: those of the *reere division*, *wheeling* off to the *left*: either of them *placing* themselves in the *reere* of their *owne divisions*. The Muskettiers having fired *once* or *twice over*, *wheele* your *flankes* into



into the *front*, and cause your Pikes to *charge* to the *front* and *reere*. The Pikes being againe *advanced*, and all *faced* to their former *front*, *wheele front* and *Reere* into both *Flankes*, and face as before.

\* The *Plinthium* is in chap. 102.

For the *seventh firing*, make the \* *Plinthium*, or *foure fronted battell*, the *Angles* being filled with Pikes: and let them give fire, and *charge* their Pikes, according to directions for that Figure. As likewise the firing being ended, *reduce* the men backe into their *places*, as they were before this firing began. Then, *wheele off* your *front* by *division*, which brings your Muskettiers upon the *flankes*; but doth not *reduce* your men justly into their places, if your *number* be any thing great.

\* The *crosse Battell* as in chap. 99.

From thence, make them a perfect \* *crosse battell*, and let your Muskettiers give fire, *wheeling* all off to the *right*, placing themselves in the *reere* of their owne *divisions* of Muskettiers.

For the *ninth firing*, let them give fire as before; but place themselves in the *reere* of their Pikes; the Pikes *moving forwards* into their *ground*, and *charging*. Having *advanced* your Pikes, command your *flanke divisions* to *face* about to the *right*, and to close their *divisions*. Then command the *front* and *reere divisions* to *wheele* their *flankes* into the *reere*: which being done, *face* then to the *Front proper*, (that is) after the *right-file-leaders*.

For the *tenth firing*, (your Muskettiers being \* *Introduction* still in the *midst*) let them give fire by \* *Introduction* twice over, still beginning with the *second ranke*) the Pikes moving softly forward.

For

For the *eleventh firing* let them give fire by *Introduction*, (beginning with the *bringers up*) The Pikes may *charge* at discretion: then let the Muskettiers stand, and the Pikes *march* forwards: closing their divisions before the Muskettiers.

And so let the *twelfth firing* be by way of *extraduction*. Let the Pikes *charge*; which being performed, command the *first* and *last* foure *ranks* to *stand*; and the rest of the *body* to *face* to the *right* and *left*: and so to move, untill they are cleere of the *standing ranks*. Then let the whol *body* *face* *about* to the *right*, and let the *Ensigne* display his *colours* in the *midst* the *body* *standing* in this following *forme*.

*This firing is demonstrated in Cap. 80.*

*Front.*

C

S m m m m m m m m S  
m m m m m m m m  
m m m m m m m m  
m m m m m m m m

S m m m m D  
m m m m  
m m m m  
m m m m  
P P P P  
P P P P  
P P P P  
P P P P D

E

D m m m m S  
m m m m  
m m m m  
m m m m  
P P P P  
P P P P  
P P P P  
D P P P P

P P P P P P P P  
P P P P P P P P  
P P P P P P P P  
P P P P P P P P

L

A a

The

The *Muskettiers* now being foremost, let the thirteenth be a *triple firing* to the front, having fired let them *wheele off to the right and left*, the front divisions falling in the *reere* of themselves: the flanke divisions in the *reere* of their pikes; they moving forwards, and *maintayning* the *Muskettiers* ground. The pikes on the flanks may charge: the *Muskettiers* of the front division had need be *halfe pikemen*, that so they may defend themselves from the horse.

For the foureteenth firing make the *Crown-battell*: for the produce whereof observe these following *directions*. First command the *foure middlemost rankes*, of the flank divisions face to the right and left outward & move cleer of the standing parts. Secondly command the *foure innermost files* of the front and reere divisions to move forwards untill they stand cleere of the same Armes: This being rightly performed, this following figure will be produced.

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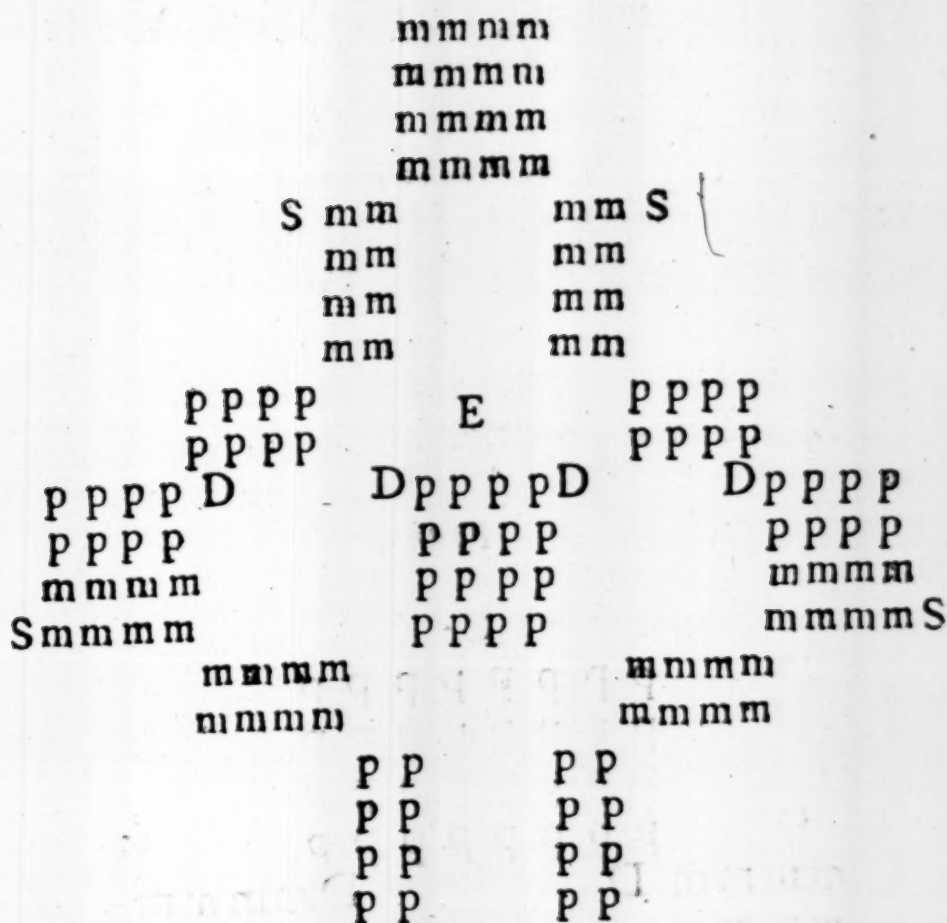
Front.

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*Front*

C



L

*Reere.*

In this *forme* you may give fire to the *front*, or to the *front and reere* at discretion : having performed, what you hold requisite on this figure; close the *divisions* back againe into their places, (that done) face the two *flank divisions* to the right and left inward, and let them close in like man-

Or wheele your  
front inward to  
the Reere.

ner. This makes your *body* 16 deep, foure ranks of *muskets* and foure rankes of *pikes* then foure other rankes of *shot* and foure of the *contray armes*. Next *wheele off your front by division*, and *close them* againe; this, nothing altereth the *forme*: but onely brings the inside outward.

For the fifteenth *firing* first Command the *Muskettiers* to *face to the right and left outward*, and *move cleer off the pikes*, then stand and the *whol body* *face about to the right*, the *Captaine* going to the head of his *pi es*, shall there find all his *proper fileaders* faced towards him, and the whole *body* in this following forme.

Front.

C

```

      p p p p p p p p
      p p p p p p p p
      p p p p p p p p
      S p p p p p p p p S
  m m m m D          D m m m m
  m m m m          m m m m
  m m m m          m m m m
  m m m m          m m m m
                        E
      p p p p p p p p
      p p p p p p p p
      p p p p p p p p
      p p p p p p p p
  m m m m D          D m m m m
  m m m m          m m m m
  m m m m          m m m m
S m m m m          L m m m m S
                        Reere. Let
  
```

Let the Muskettiers *give fire to the Reere, and both flanks Marching.* They may give fire and keep their figure, or they may give fire and *flanke* their *pikes*: if the latter, then Command the *reere* The reduction. *division close forwards and all is reduced* as at the first. If the former then *all the divisions are to close forward.* And herewith wee will conclude our *third daies exercise, and lodge our colours,* untill that the bellowing *Drum* call us the fourth time into the *field*, to give an account of our proficiency. Till when, wee will leave our *souldiers* to repaire to their *quarters*, rest their *limbs*, refresh their *spirits*, and replenish their *bandiliers*.



CHAP. CXVII.

*The foureth dayes exercise.*

HAVING the fourth time brought your *souldiers* into the *field*, and (as formerly) caused them to be instructed in the postures, (both of *musket* and *pike*) that so they may be capable to use them both with *agility*, and with *safety*. As likewise taught them their divers wayes of *distance*, with the severall, and various motions: not forgetting, particularly to instruct them with *rules* and *pertinent reasons* to every one of them: that so they may, not onely learne to do but like



*rationall men understand* what they do. Which being deliberately performed, and each Officer disposed to his severall *place*, the *ranks* being *e-vened*, and the files *straightned*: the Captaine *com-mands*, the *Drum beats*, and the muskettiers make ready for skirmish, &c.

You may either draw forth the innermost or outermost at discretion.

The first firing, being by *drawing* forth the *innermost files* of each *flanke* of Muskettiers, to the *right* and *left*, obliquely *before* the *front*, and so to stand and give fire. Having given fire, let the *bringers up* lead them back into their *places*. And, in the meane time, let the next *innermost* files, *leade forth* and fire, after the same manner; and so likewise the rest, untill all the Muskettiers have fired *once over that way*.

As in Cap. 96.

For the second firing, let them give fire *obliquely*, and *crosse* the *front*, both at once.

For the *third*, let them give fire obliquely: the Muskettiers standing before the pikes, in forme of an *hollow wedge*. Upon this firing the Muskettiers fire *outward*: whereas in the *other* they fire *inward*.

As in Cap. 97.

For the *fourth* firing, let them fire upon the oblique *W*. For the manner of these firings, with the *wayes* both how to *make* them & reduce them: I refer you to their severall *places*, where I have shewne them plainly.

For the *fift* firing, let them give fire *obliquely* on the *fort battell*: that is to say to *front*, *reere*, & *flankes*. These *oblique* firings howsoever that some of them may at sometimes be *usefull*, yet here they are inserted but for variety of *exercise* and

and no otherwise to be accounted of. In all these oblique firings the pikes never come to *charge*, but stand either in a *hollow* or *solid square* in danger of the *Enemies shot*: themselves neither being able to *offend the enemy*, nor to *defend themselves*. And yet if by frequent *practise*, they were *inured* to the use of the long *bow* fastened to their *pikes*: I make no question, but that, when they should become *expert* in the use of the *bow* and *pike*; they would not onely be a *terror* to their *enemies*, by the continuall *showers* of *Arrows* which they would send amongst them; but also they would be a great meanes to rout their *battalions* and utterly *breake* their *order*. On the contrary, if men should be put to use the *bow* and *Pike*, and have not first well learnt the use of the *pike* alone; they would be so *cumbersome* to themselves, and so troublesome to others; that instead of *spoyling* their *Enemyes*, they rout themselves. But pardon this digression: whilst I proceed to the rest of this *dayes exercise*.

*Expert Bow-pikemen may be very serviceable.*

*In this forme if the Muskets ground their halfe-pikes, and the pikes open to the right and left to the utmost Angle: then the Muskettiers after that they have fired may retreat to the Reer of the pikes whilst they charge to the flanks.*

The sixth firing, being in form of a *Romane T*; is to be made as followeth. Let the *pikes stand*, and the *flanks* of *Muskettiers* wheel into the *front*: then let them give fire, making an Intervall upon each *flank*; the Muskettiers of the right *flank* wheeling off to the *right*; the Muskettiers of the left *flank* to the *left*; and placing themselves in the *Reere* of their owne *divisions*. When the Muskettiers have fired, once or twice over, let the *pikes passe* through, and *wheel* their *front* into the *midst*, and then *facing* to the *front* let them charge

their *pikes*: and from thence having *advanced* their *pikes*, let the *Commander* *pas*se to the *right flanke*; and *face* the whole *body* to the *right*. Then *wheele* the *Battell* about tot he *left*, untill the *body* be brought into a *round battell*: from whence we will begin the seventh *firing*.

The *Figure* being made, *face* the whole *body* to the *Center*, and give them their *directions*, what they have to doe. When they have received their *instructions*, let them all *face about* to the *right*; *present*, and *give fire*. The *first* time of their *firing* placing themselves in the *reere* of their owne *Muskettiers*; The *second* *firing*, *countermarching* to the *right*, and placing themselves in the *reere* of their *pikes*: the *pikes* at the same time, are to *move* forwards into the *Muskettiers* ground: where they may *charge over-hand*; and (if need be) at the *foot*: the *Muskettiers* giving *fire* over them, as in the *Convex-halfe-moone*. The *firing* being ended, and the *pikes* advanced, let the *Commander* *march* forth of the *round battell*: at that part where he shall find all his *proper file-leaders*. Then let the whole *body* be *faced* to that part, and the *file-leaders* caused to *march forth*, even a *breast*: the *muskettiers* and *Pikemen* following their *leaders*, and *marching* untill the *body* have attained their *orderly square* againe. But note, that all your *muskettiers* are in the *midst* of the *Battell*.

A quaint Re-  
ducement for a  
knowing Com-  
pany: but not  
for a large or ig-  
norant number.

The eight firing  
is the impaled  
sollid square.

For the eight *firing*, make the *impaled sollid square*: the way to performe it is as followeth.

Your *pikes* being now the *flankers*, draw forth the *moitie* of the *files* of *pikemen* from the *right flanke*,  
crosse



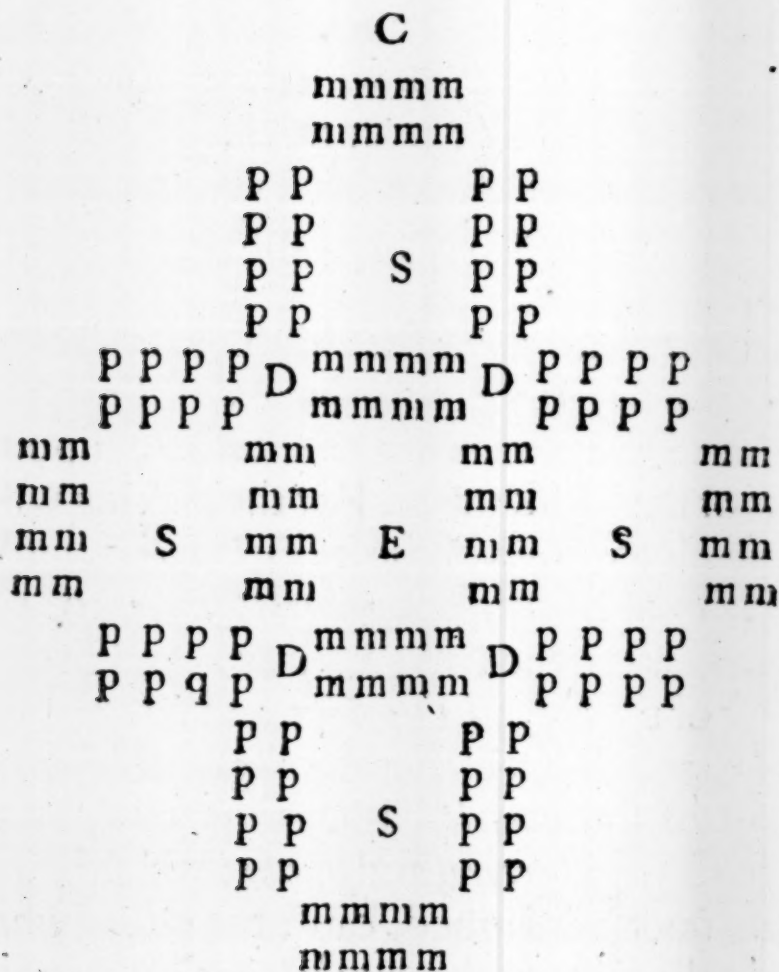
croſſe the *front* of the *body* (taking the *outmoſt files*) let *halfe* the *files* of *pikemen* of the *left flanke*, be *drawne croſſe* the *reere*, following their *bringers up*.

Then, *face* all your Muskettiers to the *front*, *reer*, and *flanks*. The pikes may *charge al overhand*: and (if need be) at the *foot* with their *swords drawn*: the *muskettiers firing* over them. Having *fired*, *charged*, and *advanced* their Pikes, *draw off* the Pikes againe, from the *front* and *reere*, into their *places*.

For the ninth *fi-ing* (the Muskettiers being ſtil in the *middle*) make the *hollow fronted-croſſe-battell*; the Pikemen making the *hollow*, upon the flanks of the Muskettiers. For the making where- of, *whee*le the *front* of the 2. *fiſt ranks*, into the *miſt*. That being done, *whee*le the *reere* of the 2. *laſt ranks* after the ſame manner: and then *face* the reſt of the *body* to the *right* and *left* and cauſe them to march untill there be a *ſquare hollow* in the *miſteſt* of the *battell*. Then *command* them to *face* to the *front*, *reere*, and *flanks*: which being in like manner performed, cauſe the *pikes* (who are now in the *front* of the *muskettiers*) to *open* to the *right* and *left*; the *laſt ranke* of *pikes ranking* even with the *fiſt ranke* of *muskettiers*. The *muskettiers* may *give fire* upon this *Figure*, *wheeling* all off to the *right*: and *placing* themſelves in the *reere* of their owne *diviſions* of *muskettiers*. If need be the *pikes* may *charge* to the *angle*, whileſt the Muskettiers give fire ſtreight forwards, this being done and the pikes againe advanced: for the tenth figure make the *quintipled hollow ſquare*, by command-

The hollow-fronted Croſſe, the Muskets making the hollow is demonſtrated in Cap. 100.

commanding the two first *rankes* of *Muskettiers* of *each division*, *move forwards cleere of the pikes*, which produceth this following *Figure*.



L

When the *Muskettiers* first give fire they will stand in the forme of a hollow *Diamond*: I forbear the figure it may easily be conceived.

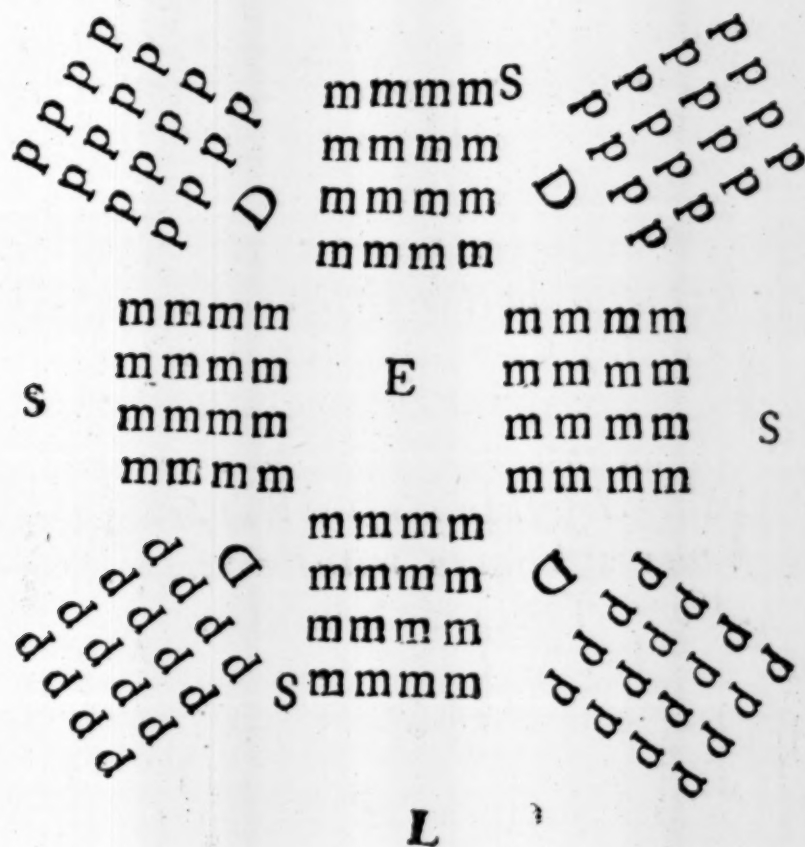
When you would come to *firing* cause the muskettiers in the *midst* to *close to the front, reere, and flanks*, and so they may give fire accordingly. The first *firing* the Muskettiers may *make good their ground*, the second time of *firing* over, they are to *ranke even with the pikes*; the third time of *firing*, the *pikes* move a little *forward* and the Muskettiers loose

loose ground : which brings them againe into the *hollow fronted crosse* ; all the while the *Muskettiers* are giving *fire* , the pikes art to *port* & charge to the *angles*. Having *advanced* your *pikes*, Command them to close their *divisions* before the *Muskettiers* , that done : Command all the *pikes*. to *face to the right* , and *move into the space betweene the angles of the muskettiers* , which produceth this following *Figure* from whence we will make our eleaventh firing.

Front

proper.

C





The eleventh firing.

On this *double crosse* battell, you may if you please give fire to the *front*, *reere*, and *flankes*: it is an excellent figure for Muskettiers with *half pikes*, for that they may move forwards and ground their *halfe pikes*, and then give fire, *one, two, three, or, foure ranks* together wheeling off and maintaining the place where their *halfe pikes* are grounded (*pal-lasado-wise*) or they may fire and *retreite* into this figure and there make ready and fire againe: the pikes may charge &c.

When the pikes are againe advanced let them move to the left into their places before the muskettiers and the whole body face to the front.

And when they be opened let the Muskets move forwards, as in the figure.

To make the twelfth figure first Command the Muskettiers of the *flanke divisions* to interchange ground with their pikes, and then to move forwards, untill the reere be advanced, even with the front angle, of their owne pikes. Secondly Command the Musketteiers of the front division, to sleeve up to the right and left of their pikes. Thirdly Command the Muskets of the reere to move forwards, and range even with the Muskettiers of the flanke divisions. Fourthly Command the front division (as well Muskets as pikes) to open to the right and left, leaving an intervall for the muskettiers behind them. Lastly close the pikes forwards in the reere, that their front may be even, with the reere of the two other divisions. The figure followeth.

Front.

Front.

S	m m				n m	S
	m m				m m	
	m m				m m	
	m m p	p			p p m m	
		p p			p p	
		p p			p p	
		p p	C		p p	
S	m m m m		m m m m		m m m m	
	m m m m		m m m m		m m m m	
	m m m m		m m m m		m m m m	
	m m m m		m m m m		m m m m	
D	p p p p	D		D	p p p p	D
	p p p p				p p p p	
	p p p p	E			p p p p	
	p p p p				p p p p	

L

The *body standing in this figure*; the two *front divisions* of Muskettiers may give *fire*, once or twice over and then flanke their *pikes*: They may *fire* againe and fall in the *reer* of their *pikes*. One, two, or three of the other *divisions* of muskettiers may *move* forwards, and *give fire*: the two *front divisions* of pikes in the meane time charging. Having fired twice or thrice over at discretion the two *middle divisions* of pikes are to move forwards, to  
port

*port and charge; the Muskettiers in the meane time firing and loosing ground. By which meanes the flank divisions of Muskettiers, will againe flanke their pikes. Then, because we will come to reduce-ment. First Command the middle division of muskettiers (the which pertaine to the reere) to move backe into their places. Secondly command the two front divisions to close together. Thirdly command the muskettiers and pikes of the flanke divisions to interchange ground, and then close their divisions. Fourthly command the front and reere divisions to wheele their Muskettiers into the midst. Lastly wheele off your Battell by division after which having closed their divisions, they are perfectly reduced as at first. And herewith we will conclude this dayes exercise, and leave our Souldiers to rest: untill that the morrows Sunne, and the thundering Drum shall call us forth againe into the Field.*



## CHAP. CXVIII.

### *The fifth dayes Exercise.*

**H**AVING the fifth time brought your Souldiers into the *Field*, if you have leasure, it will not be amisse for to cause them to be instructed (in the first place) in the *postures* of the *pike* and *muskett*.



ket. For those *Souldiers* which by often practice of their *postures* are growne *perfect*, will *manage* their *Armes* with ease, surety, and celerity: when on the contrary, the *unpractised Souldier*, will be a *trouble* to *himselfe*, a *danger* to his *fellowes*, and a *Dormant* to his *Enemies*.

*The postures cannot be too often practised by young Souldiers.*

After the *postures*, each *file* being drawne into his *place*; and the *Ensigne* (according to former directions) brought to the *head* of the *pikes*; the *Ranks* *evened*, and the *files* *straitened*; the *Captaine* having commanded *silence* and delivered himselfe in such *tearmes* as the present occasion doth require, ever preferring the *industrious* and *painful*; and on the contrary, blaming the *carelesse* and the *slothfull*) he next proceeds to instruct them in their *severall distances*: and these, indeed are the *ground* of all *motion*: seeing that without *distance* the *motions* cannot be *executed*. Next to the *distances*, they are to be instructed in the *motions*: ever observing to each *motion* its due *distance*.

*Distance is the ground of motion, because no motion can properly be performed without its due distance.*

Next after *postures*, *distance*, and *motions*; let the rest of the dayes *Exercise* be spent in *firings* and *figures* of *Battell*. Each *Officer* having now received his *severall Charge*: The *Captaine* commands; the *Drums* *beat*, and the *muskettiers* *make ready*.

Let the *first firing* be performed by *leading forth* the *outermost file* of each *flank*, twenty or thirty *paces* before the *front*. When being come to the place of *firing* (where they may *surely* doe *execution*) let them *ranke foure*. That is to say, the three *men next* behind the *right-hand-file-leader*, shall rank *inward* to the *left*, even with their *file-leaders*:  
the

the three *next men*, after the *left-hand-file-leader* ranking *inwards* to the *right*; *even abreast* with the leader of their *file* the residue of each *file*, keeping themselves in *file*; and *closing forwards* to the *distance* of order, just after their *file-leaders*. The first four of each *file* having *presented*, *fired*, and *wheeled away*; the last four men (being the *Reer-halfe-files*) in the *interim* of their *wheeling off* ranke to the *right* and *left inward*: *presenting*, *firing* and *wheeling off* (as aforesaid) and *placing* themselves in the *Reere* of the former part of their *files*, which *wheeled away* before them. The second *files* are then to lead *forth*, and to do the like; and so successively, the *rest*, untill they have all *fired over*, this way.

For further direction to this firing turn to Cap: 73.

For the second firing, let the *outermost* files lead *forth* to the same *distance* before the *front*; *whither* being come, as to the place wherein to doe their *execution*, let the files rank to the *right* and *left inward*; and so fire altogether: *wheeling off*, & *placing* themselves as in the former firings. The residue of the other *Files* of *Muskettiers*, at the same time, *marching forth* giving fire, and still *placing* themselves *file-wise*, on the *innermost part* of their *owne divisions* of muskettiers; and *next* to the *outside* of *Pikes*.

For the third firing, send forth the four first ranks about *ten paces* before the *front*: Let the *two first ranks* present together, the second Rank *closing forwards* and *presenting* *betweene the intervals* (or spaces) of the first rank and so *power out their shot together*. When they have given fire  
let

let the first *ranks*, first *wheele away*, the second ranks following them. The other two ranks *clo- sing, presenting, firing, and wheeling away* as afore- said, falling in the *reere* of their owne *divisions* of *Muskettiers*. The next *fourre* rankes moving forward and doing the like &c.

Let the fourth *firing*, be performed to both *flanks* upon a *stand*: *facing* the whole *body* to the *right* and *left*, there *firing wheeling off by division*, and *flanking* their *Pikes*. Whilest the two last *ranks* are *giving fire*, let the *Pikes port*, and when the *Muskettiers* have *fired*, and *wheeled off*, let them *charge*. As in cap. 92:

Having *advanced their pikes*, face the whole *bo- dy* to that part where you shall find your *file-lea- ders* of *Muskettiers*: then will all your *Musket- tiers*, be in *front* and *reere*. Next, command your *halfe-files* that then are, to *double* your *front* to the *left entire*: which being done, this following *Figure* will be produced.

C

S	P	P	P	P	P	P	P	P	D	m	m	m	m	m	m	m	m	S
	P	P	P	P	P	P	P	P		m	m	m	m	m	m	m	m	
	P	P	P	P	P	P	P	P		m	m	m	m	m	m	m	m	
	P	P	P	P	P	P	P	P		m	m	m	m	m	m	m	m	
D									E								D	
	m	m	m	m	m	m	m	m		P	P	P	P	P	P	P	P	
	m	m	m	m	m	m	m	m		P	P	P	P	P	P	P	P	
	m	m	m	m	m	m	m	m		P	P	P	P	P	P	P	P	
S	m	m	m	m	m	m	m	m	D	P	P	P	P	P	P	P	S	

L

Bb

The



This is the fifth  
firing.

The *Muskettiers* may give fire on this figure, to the *front* and *reere*, or to the right and left: The firing by me intended is to both *flanks*; to which purpose *face the body to the right and left by division*. Let the *Drum* beate, the *Muskettiers* make ready, present and give fire, all wheeling off to the left, and placing themselves in the *reere* of their owne divisions. The pikes may also port, and charge as they see occasion. The *Muskettiers* having all fired, the pikes againe advanced, and the whole Company, faced to their former front, cōmand the half-ranks of the right, (both *Muskettiers*, and *Pikes*) to march, and the halfe ranks of the left flank to follow in the *reere*.

Half ranks of  
the right or  
right flanke,  
both intend the  
same thing.

The sixth firing.

Having given them some time of breathing, then for the *sixt Firing*, cause the *halfe-files* that then are, (*muskettiers* and *Pikes*) to face to the *reere*. Which being done, let the muskettiers give fire to the *front* and *reere*, upon a stand, wheeling off by division, and placing themselves in the *reere* of their pikes; they moving forwards, and maintaining the *Muskettiers* ground. The *Pikes* are then to charge, when they are cleered of their *muskettiers*. Which being done, and they againe advanced, face them all to their former front.

The seventh firing.

For the *seventh firing*, cōmand *half-files* to double the *front inward, entire*. To which purpose, open the *front halfe-files* (both muskettiers and *Pikes*) to the right and left; for receiving the *halfe-files* of both *Armes*, within them: which being executed, each *Armes* will stand in three divisions as you may perceive by this following Figure.

When

C

S	p	p	p	p	D	m	m	m	m	m	m	m	D	p	p	p	p	S
P	P	P	P			m	m	m	m	m	m			P	P	P	P	
P	P	P	P			m	m	m	m	m	m			P	P	P	P	
P	P	P	P			m	m	m	m	m	m			P	P	P	P	

E

m	m	m	m		p	p	p	p	p	p	p		m	m	m	m
m	m	m	m		p	p	p	p	p	p	p		m	m	m	m
m	m	m	m		p	p	p	p	p	p	p		m	m	m	m
S	m	m	m	D	p	p	p	p	p	p	p	D	m	m	m	S

L

When you intend to give fire, Command the half-files to face about, and performe the firing to the front, and Reere, wheeling off by division, and placing themselves in the Reere of their owne divisions. The pikes may charge at discretion. Having advanced your pikes and faced the whole body to you. Let your eight firing be upon the Checker Battell (of eight divisions.) To make the which Command *Left flanke double the right flank by division.* This Command being executed, the Checker battell is finished, you may give fire upon it to the front, reere, and flankes, either standing, or marching: the Muskettiers still placing themselves either after, or within their owne divisions of like Armes. The Pikes may also charge, as you see occasion &c. Many formes might be made from this Checker Figure, the which for the present I omit: Therefore Command the first and last foure Ranks to face to the left and march,

These 8. inmost  
files, are the half  
files of muskets  
and pikes which  
doubled the front  
inward intire.

being moved cleere of the *standing part of the body*, let them *close their division*, and *face to the front againe*: this brings them into *six divisions*.

Next Command the *eight innermost files to face about* and *march into their places*. The *halfe-files* being *faced about*, and *marched cleere off*, then are the *front halfe files to close their divisions*, this being performed, and all rightly *faced*, the *Muskettiers* will be in the *midst*, and the pikes on the *front and reere*. Let your ninth firing be to the *reere and right flanke* together. And to that purpose, first Command-*half-files double your front, to the right intire*: that being done let the *half-files that doubled, wheele their Battell to the right*, and then being faced to the front they will stand as in this following *Figure*.

E C

S. p p p p p p p p D p p p p D m m m m S

p p p p p p p p p p p p m m m m

p p p p p p p p p p p p m m m m

p p p p p p p p p p p p m m m m

m m m m m m m m p p p p m m m m

m m m m m m m m p p p p m m m m

m m m m m m m m p p p p m m m m

S m m m m m m m m D p p p p D m m m m S

L

As the *body now stands* faced you may conceive a firing to the *reere* and *right flanke marching*: the which may be performed *these two severall wyes*.  
The

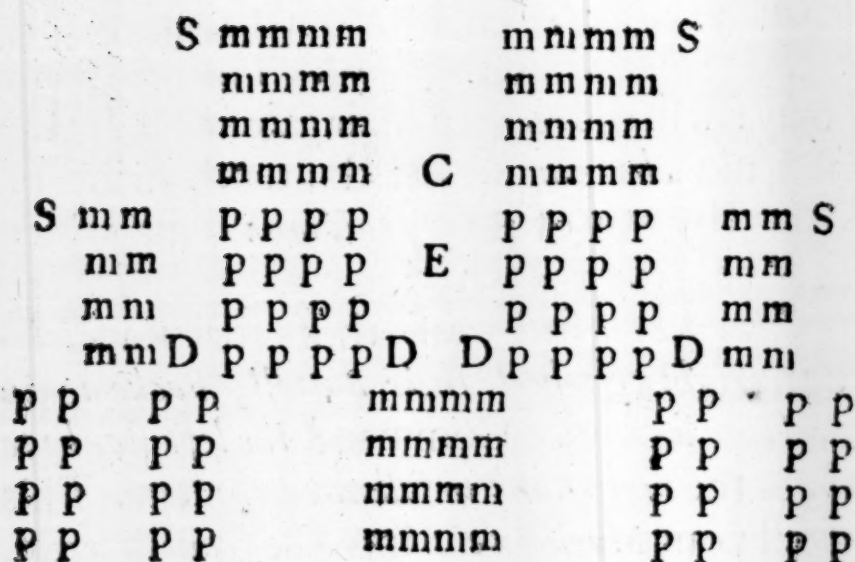


The muskettiers of the *reere*, having fired may *wheele off*, to the right, and place themselves, next after the *pikes* in the *front* of their own *divisions*. Note that there must a division be made between the midst of the muskettiers and pikes of the left flank for the Musket move through. The Muskettiers of the *right flanke*, having at the same *instand* fired, may place themselves in the *inside* of their *owne divisions* next the *pikes*. A second way to place themselves, after that they have given fire is this; the muskettiers which fire in the *Reere*, are to place themselves before the *front* of *Pikes*; the Muskettiers of the *flanke* place themselves on the *inside* of the *right flanke* of *pikes*. The whole body may stand and *pikes* charge to the *Reere* and *right flanke*. If on this figure you would give fire standing, then face the *right flank* to the right and *left flank* to the *reer*: & open an *interwall* in the *middle* of the *left flanke* for the muskettiers to move thorow. The first time of their firing the Muskettiers may place themselves in the *reere* of their *owne division* of shot. The second time they may *flanke* their *pikes* whilst they *port*. The third time they may fall in the *reere* of their *pikes* they in the meane time *charging*. Let the tenth firing be performed by way of *Extraduction*: the which being done, the *pikes* having charged and being againe *advanced*. first cause those that stand faced to the right, to *wheele* their *Battell*, backe again to the left. secondly Command the *left flanke* to march, & the *right flank* to follow on the *Reer*. This brings all your Muskettiers into the *front* & *reere*. Extraduction as in cap: 80.

Having suffered your Souldiers to have a breathing time, come to the eleaventh firing. To make the figure first Command, *front halfe-* The direction to make the following Figure.  
files

*files* (as well pikes as muskettiers) open to the right and left to a Convenient distance, (to receive another division.) Secondly Command *half-files of pikes move to the right and left untill you stand cleere of the pikes before you.* Thirdly Command, *the foure innermost files (of the reere division) of Muskets move forwards to the reere, of the the Intervall betweene the pikes.* Fourthly Command, *the two last divisions of pikes, open the right and left, and make intervalls for the two divisions of shot in the reere to passe through: that so they may range even breast with the front of pikes.* These Commands and directions duly executed produceth this following Figure.

## Front



L

On

On this *Figure* we will give fire to the front, the two first divisions may begin the firing and the first time fall in the reere of their own divisions of Muskettiers, the second time of their firing over, they may place themselves in the reere of the pikes: the pikes may charge and the reere divisions of muskettiers may move forwards, being advanced into convenient ground, they may present and give fire together with the two division of shot, on the wings. Let them fire and gaine ground, let them fire and maintaine ground, let them fire and loose ground, falling backe againe into the reere, behind the intervalls of their pikes. All the pikes having charged may advance. By this time sable night be-

gins to appeare and therefore we will come to *Reducement*. First Command all the Muskettiers to close their divisions. Secondly cause the two reere divisions of pikes to close to the right and left inward and the two front divisions of pikes close to the right and left outward, just before the other divisions of pikes. Thirdly Command the Muskettiers to move forwards and even their front of pikes. All this being done, your muskettiers are in the midst and the pikes on their flanks. Now if you please to open the Muskettiers to the front and reere it will make a hollow square for the Ensigne to display his colours. If you will come presently to *reducement*, Command your Muskettiers and pikes to interchange ground, and all will be perfectly reduced as at first. Therefore now let us lodge our colours with our accustomed *Bene vale* and conclude our fift dayes exercise: suffering our Souldiers to

The reducement

The muskettiers may soone close their divisions by reason they stand neere altogether, being so left in this last firing.



depart to their severall *habitations*. There leaving them to *cleafe their Armes* and to *refresh* their *bodies*, untill the Morrowes *Clammoring Drum*, invite againe into the field.



### CHAP. CXIX.

#### *The sixth dayes Exercise.*

**H**AVING the sixth time brought your *Souldiers* into the *Field*, according to the accustomed manner: let each *file-leader exercise* his *file*, in the *Postures* of such *Arms* as they carry. Which being performed, and the *files* againe *rejoined* into one *body*: the *Ensigne* being at the *head* of the *pikes*, and the rest of the *Officers* in their severall *places*. The *Captaine* having *commanded silence*, *attention*, and *obedience*, (three especiall proper-tyes most necessarily requisite to every *common Souldier*) he proceeds to the severall *distances*; instructing them in the *uses* of each of them. Next after the *distances*, he teaches them the *facings*, the *Doublings*, the *Countermarches*, and the *wheelings*, with severall *Observations* upon each of the *motions*. After which (having so *commanded*) The *Drums* beat, and the *muskettiers* make ready for *Skirmish*. Then (if you please) you may cause three or foure of the first *firings*, to be performed by *light Skirmishing* before the *front*: and that with *loose ranks* or *files*, or both: either some of those,

those, (or such like) as I have formerly spoken of in the *preceding Exercises*. After which, for your *next firing*; cause your *halfe-files* to open to the *right* and *left*, by *equall division*: untill the *Reere-divisions* of *pikes*, stand right after the *Muskettiers* of the *front-division*. Now the *Muskettiers* standing in *four* *Divisions*, let them all *present* and give fire to the *front*: *wheeling all off* to the *right*, and *placing* themselves in the *Reere* of their *owne divisions* of like *Arms*: each *Ranke* still making good the *Leaders ground*. Having *given fire*, *once* or *twice* over on this *figure*: For the *second firing* cause the *front-division* to give fire to the *front*; and the two *Reere-divisions*, to each *flanke* in a *march*. The *front-division* which fires in *Rank*, *wheele all off* to the *right*, *placing* themselves in the *Reere* of their *owne divisions* of *muskettiers*: the other *Divisions* which fire in *flanke*, *leading up* their *files* betweene their *owne divisions* of *muskettiers* and the *pikes*.

The first firing  
by four divisions  
to the front:

The second firing  
is to the  
front and both  
flanks marching.

Having *given fire once* or *oftner over*, according to discretion this way; let the *third firing* be performed upon a *stand*. For the which, cause your *reer-divisions* to face to the *right* and *left outward*: the *front-division*, still to continue the same *aspect*.

The third firing  
is the front and  
both flanks  
standing.

Then, let the *muskettiers* give fire; those of the *right flanke*, *wheeling off* to the *right*: and the *contrary flanke*, to the *contrary hand*; the *muskettiers* of the *front-division*, *placing* themselves in the *reer* of their *owne divisions* of *muskets*; the *muskettiers* of the *reere-divisions*, *placing* themselves in the *reere* (of the *reere-divisions*) of *pikes*. When they have

have fired all over, let the *pikes charge*, to front and both flanks.

The fourth firing is to the reere and both flanks marching

Having advanced your *Pikes* againe, and faced your *body* to the front proper, each *Arms* still standeth in three *divisions*. Then let the fourth *firing*, be to the *reere* and both *flanks* upon a *march*. And to that end, open your *front-divisions* of Muskettiers to the *right* and *left*, untill they are cleere of the *reere-divisions* of *Pikes*: that so they be not troublesome unto them in their *march*. Then let your *pikes shoulder*; and the Muskettiers give fire: the *front-divisions* of Muskettiers, firing in flanke, and leading up on the *inside* of their owne *divisions*. The Muskettiers of the *reere-division* giving

The fifth firing is to the reere and both flanks standing.

fire in the *reere* in *ranke wheeling off* by *division* and placing themselves in the *front* of their owne *divisions* of Muskettiers. Having fired once over and the *pikes charged*; let your fifth *firing* be to the *Reere*, and both *flanks* upon a *stand*. In the which, let the *halfe-files* (both *Muskettiers* and *Pikes*) face to the *Reere*; the *front-division* to the *right* and *left*, and so give fire on each part: those that fire to the *flanks wheeling off*, and placing themselves in the *Reere* of their *divisions* of *pikes*, and the *Muskets* of the *Reere-divisions wheeling off* to the *right* and *left* and placing themselves in the *Reere* of their owne *divisions* of *Muskettiers*: each *Ranke moving forward* into their *Leaders ground*. Having fired over, let the *pikes charge*. The *pikes* being againe advanced; face the whole *body* to the proper *front*: and then all the *muskettiers* will be in the *midst*, and the *pikemen* on the *flanks*.

For



For the sixth firing, cause your halfe-ranks of the left, double your right flanke by division. For further directions, looke back to the tripartite firing: which you shall find, Chap. 94. Having fired over that way; charged, and re-advanced your pikes: face the whole body to their former front.

*The sixth is a firing tripartite as in Cap. 94.*

For your seventh firing, cause the front and reer divisions of Muskettiers and Pikes, to face to the right: the rest of the body (both Muskets and Pikes) to the left. Let the Muskettiers give fire, and wheel all off, either to the right or left, and place themselves in the reere of their following divisions of Pikes: each rank still moving up into their leaders ground. When there rest but two ranks of each division, to fire, let the Pikes port. Having all fired and wheeled away; let the Pikes charge. Then face the whole body to their first front; and command the first and last foure ranks to face to the left: and to march, untill they are cleere of the standing part of the Body. Then, cause the front-halfe-files to face to the left, the reere halfe-files, to the right: and so to close their divisions: and after that to face towards their Leader.

*The seventh is a firing to both flanks in three divisions.*

*This perfectly reduceth the whole body; every man to his place.*

For the eight firing: make the solid square girdled with Muskettiers. For the which, draw halfe the files of the right flank of Muskettiers crosse the front, and halfe the files of Muskettiers from the left flank crosse the Reere. Then face the whole body (both Muskets and Pikes) to the front, reere and flanks. This done, let the Muskettiers give fire and wheele off by division: placing themselves in the Reere of their owne divisions of Muskettiers.

*The eight firing is the solid square girdled with shot.*

All the time of this *firing*, the Pikemen being in the *middle* of the Muskettiers, have good opportunity (if the *Enemy* be neere) to *gall* them with their thick *showers* of feathered shot. The Muskettiers, in the meane time, having *fired once, twice, or oftner over*, on this Figure, draw your *files* of Muskettiers back againe into their places.

The ninth firing is to the front and reere upon Captaine Wallers double figure.

Then having *faced* the whole *body* to the proper *front*, let your *ninth firing* be [Captaine Wallers *double firing*] to the *front and reer* after this manner.

First; *wheele front and reere* into the *right flank*: then *face* them all the *same* way they were before: which done, cause the *half-files* to *face* to the *reere* and *command* the Muskettiers which are in the *reere* of each *division* of pikes, to *double* their *front* of Pikes by *division*. Then, let them *face about* and *close* their *divisions*: and so having *refaced* them as they were; let them *give fire, wheele off, and charge*, according to directions on Captaine Wallers Figure.

The tenth firing to both flanks standing.

For the *tenth Firing*, let them *face* to the *right and left*, and give fire to both *flanks* upon a *stand*: *wheeling off by division, and flanking* their Pikes.

The bringers up being now the file leaders.

When the *pikes* have *charged*, and are againe *advanced*, let the *Captaine* passe to the *front accidental* of the *left flank*, and *face* the rest of the *body* to him, and in the next place *wheele* their *flanks* into the *front*, and so all the *Muskettiers* will be in the *front*: and by *facing* the whole *body* to the *left*; all the *Muskettiers* will be on the *right flank*.

The eleaventh firing is on the diamond figure.

Let the *eleventh figure* be the *Diamond Battell*. Having *given fire two or three severall wayes*, according

according to the *directions* upon that *figure*; charged *pikes*, and reduced them againe into the *Square*: face the *body* about to the right: and passe the *Muskettiers* which belong to the *right flank*, between the *ranks* of *pikes* into their *places*. Then the *Muskettiers* of the *left flank*, being closed to their *pikes* the *Body* will stand at their *first order*. As in cap. 78.  
The body againe Reduced.

For the twelfth *firing*, make the *hollow Square* girdled with shot: let them give fire upon that *figure* (both *without* and *within*) according to the *directions* for that *firing*. Let the *pikes* charge; and reduce them in the same manner as I have discoursed upon that *figure*. The twelfth firing is the hollow square girdled with shot as in cap. 105.

For the thirteenth *firing*, make the *Plesium* as you shall find *directions* in the 106. Chapter. The thirteenth firing is as in cap. 106.

Having made it, given fire upon it, and reduced it as at first.

Let the fourteenth and last *firing* for this exercise be the *Hollow Hearse* and *Crosse*. Turne back to the 104. Chapter, where you may find ample *instructions* for the *making*, *firing*, and *reducing* of it. And lastly, that you may conclude with triumph cause your *Ensigne* to be displayed in the middle of the *Hollow Crosse*: and then having fired, charged *pikes*, and reduced your *men*, according to the *directions* on that *figure*, your *men* will be as at first. And therefore, seeing that by this time *night* is come; and our *powder* gone: we will here give conclusion to our *sixth dayes Exercise*. The fourteenth firing is as in cap. 104.

Wherefore, that you may observe some forme in the *lodging* of our *Colours*, cause your *muskettiers* to march in the *front* of your *pikes*. Then, as they A direction to lodge the Colours



The ranks of  
muskettiers are  
to file to the  
right and left  
outwards.

they march, let them *invert* to the *right* and *left* : which is, when the Ranks *file* to the *right* and *left* by *division*. Then, cause all your Muskettiers to *face in opposition* : to cock their *matches*, guard their *pans*, and *rest* their *muskets*. In the meane time, let the *pikes advance*, and *close* their *ranks* and *files*, to their *order*. Which being done, the *Captaine*, *Lieutenant*, *Ensigne*, and *Drums* beating a *troope*, at the head of the *pikes*: *pass* through this *Guard* into the *appointed place* for the *allodgement* of the *Ensigne*. Then, the *Serjeants* cause the *muskettiers* to *face all about* to the *right*, and *present* : and upon the *first beat* of the *Drumme*, they all *give fire* in one *Volley*. And now having performed our *sixth dayes Exercise*, the *Drumme* beats a *Call* : and makes *proclamation*, that every man depart unto his severall home, untill his next *Summons* into the *Field*.

5







CHAP. CXX.

*Of the Brigade; the number and way of drawing up a Squadron. Next the composing three Squadrons into one Brigade. And lastly of imbattelling three Brigades, after the manner of the King of Sweden.*



OR as much as that *military* mirroure of our times, *Gustavus Adolphus King of Sweden*: was found not onely able to wage a warre with the *imperiall Austurian bird*; But that he soared even to admiration *pluming and tearing the best feathers from his back and wings*, none of his *Commanders nor Generalissimos*, being able to withstand the *torrent* of his *vicories*. It cannot be denied but that (next under God) his *discipline*, and new manner of *Imbattelling* was a great (if not the greatest) meanes for the achievement of the height of

*Phillips new discipline raised the Macedonians glory.*

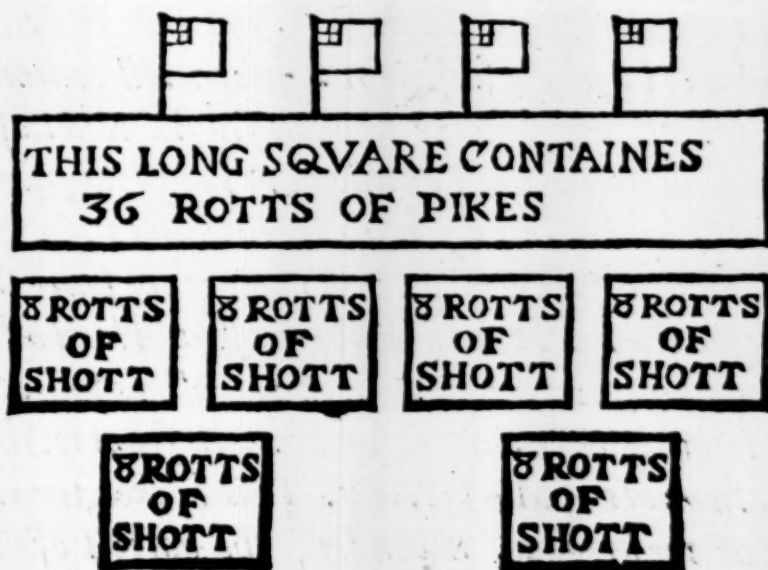
All the figures  
in my booke  
are shewn with  
the number of  
128. men.

his designes. And therefore as in all the former part of my booke, I have explicated, and set forth the *postures, motions, firings, and figures of battell*: to be practised by *files Corporallships, divisions, companies, Squadrons*, and some for *larger bodies*. So have I delivered and demonstrated them all by the *number* of a hundred twenty eight men. Whereby all such as have a fancy or delight in the *exercise of the Infantry*, may be so enabled to the *worke*, that they need not continually pore upon two or three firings thereby breeding *satiety*: But with delectation to themselves, and *profit* to their *souldiers*, may *exercise their bodies* with more *variety*. Unto which purpose I have also added for the close of this my booke, the *number, and manner of Imbattelling* into that *forme* of the *swedish brigade*, which hath proved so fatall a *figure* to the house of *Austria*. The knowledge whereof as I assume not particularly to be mine owne, but a collection. So the *figure* shall be drawne up according to its own *tearmes of art and words of direction*. And therefore for the better satisfaction of the desirous, we will begin with a *file* and so proceed untill we have *formed a perfect brigade*. First you are to note that *six men* make a *\*rot*. Three *rots* of pikes make a *corporallship*: but the muskettiers have foure *file* to a *Corporallship*: Three *corporallships* of each *Armes* makes a *compleat Company*, that is to say *nine rots* of pikes, and *twelve rots* of muskettiers *twenty one rots* together which amounts to the *number* of one hundred twenty six men besides all *officers, muster-jongs* and *pasuo-*

\* file.

*pascolants*, foure of these *Companies* make a *squadron*: and three such *squadrons*, formes a perfect *brigade*. The *squadrons* are sometimes drawn up as this following *Figure*.

*A Squadron or third part of  
a Swedish Brigade.*



One of these *squadrons* contains 504 men whereof 408. are sometimes drawne-up as in this figure. Sometimes they are arranged all abreast foure corporalships being alwayes left in the reere as a Reserve, of this more in the *Intelligencer*.

By the standing of this *squadron*, or third part of a *brigade*: you may easily perceive, how apt and ready they are to be *imbatelled* into any forme, either offensive or defensive. But because I in this chapter intend no other variety, but onely to shew the drawingup of the *brigade* it selfe: therefore proceed we to the demonstration thereof; as it is set forth and expressed in words, By *Collorell Robert Monro*, in his booke intituled *Monro, his expeditions and observations*. His directions in effect are as followeth.



126 men a  
compleat com-  
pany.

Plottons are  
small divisions

Even with the  
front but on  
the left flanke.

*Twelve compleat Companies make up three Squadrons: every Squadron of pikes and muskets being drawne up severall apart; the pikes and Colours on the right hand, the Muskettiers on the left. Three Squadrons thus drawne up, compleats a Brigade of foot, to be divided as followeth. (viz.) Eight Corporallships of muskettiers, being thirty two Rots divided into foure plottons, every plotton being eight in front, led off by a Captaine, and every division after him led up by a sufficient Officer: till coming to a halt all are drawne in even front. Next after these, the thirty six Rots of Pikes are to follow, (being twelve Corporallships) with their Cullers, a Captain leading off the first five rots before the foure Cullers should stirre. Then the Ensignes should lead off the next division, their furers with their Cullers following them till they are drawne up even in front with the thirty two rots of Muskettiers. This makes the right wing of the brigade. Secondly, the battell of pikes moveth forwards in divisions doing in all respects as the former: untill they range even in front, with the pikes of the right wing. Then the other thirty two rots of muskettiers belonging to the midle squadron (who are appointed to make the battell of the brigade) are to be led up as the first muskettiers in all points: but to be drawne up at a reasonable distance, behinde the pikes of their owne squadron. Thirdly, the last squadron of pikes marcheth up in all respects observing the former order: moving forwards untill they have attained to range even in front with the other pikes. After them marcheth forwards the thirty two rots of muskettiers (in foure divisions) observing the former directions*

*directions, untill they are equall in front with the whole pikes, which maketh up the left wing.*





*This being done, the battell (or middle squadron) of Pikes and Muskets are to advance forwards in one body, till they are cleere of the pikes and muskettiers of the wings. Lastly, the surplus of the three squadrons being forty eight rots of Muskettiers, are drawne up behind the brigade: where they are to attend the Commands of their Officers, either to guard the Baggage or Cannon, to be Convoyes to bring amunition or victuals to the rest; or to continue a reserve to waite upon all occasions. Observe the figure of the Brigade. upon the other side.*

Even with the left flanke.





The surplus of each squadron is 16 Rots which together makes 48 Rots



Fol. 373.

6 NOIS  
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8 ROTS  
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8 ROTS  
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# 8 ROTS OF SHOTT

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# 8 ROTS OF SHOTT

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176.

176. 176. 176. 176. 176.

Fol. 373: v



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A compleat *Brigade* (saith *Collonell Monro*) consists of *twelve Companies*, each *Company* con-  
teyning 126 men. The which is to be understood of full and compleat *Companies*. Otherwise and most usually of *two Regements*, *eight Companies* making a *Regement* consisting of one thousand and eight men. So that one *Regement* and halfe, of whol and full companies, would perfect a *Brigade*: or two *Regements* of *torne* and *broken Companies*, the overplus being alwayes added to the *Reserve*. Notwithstanding it so hapned at the *battell* of *Lutzen* that *Mitzlaff*, *Gerstorfs*, and *Rosser*, three *crased Regements* made up but one *Brigade*, being the outmost *Brigade* to the left of the *second Range*. And towards night in the same forenamed *Battell* going to rally up the two broken and shattered *brigades* of yellow and blew, belonging to *Grave Neels* and *Collonell Wincle*, there were not men enough left *unhurt* and *killed*, wherewith to make one *Squadron* (or third of a *brigade*) to make another charge. Let this suffice both for the number and order for the drawing up and making the *Swedish Brigade*. If any be desirous to know the places of the *Commanders* and *Officers* of the *Brigade*, there is a draught communicated by my Lord of *Reay*, and set forth in the *Swedish Intellegencer*.

The Swedes have but 8 companies in a regiment. Look the Swedish Intellegencer.

The description of the Battell of Lutzen pa. 168. the intellegencer

I should now shew you the manner how the *Muskettiers* performe their firings on this Figure. The which by al information that hitherto I could gather, have been these two: namely by \*advancing \*Introduction. or gaining ground, or by *Salves*, powring on *showers* of *Lead*, by firing two or three *Ranks* together.

*A salve is when  
2, 3, or more  
rankes powre  
out all their shot  
together in one  
vollie, as we u-  
sually do with  
our halfe pikes.*

ther. I might here adde how usefull a Weapon our *halfe-pikes* would prove in this *figure*: especially if the adverse party had any *horse* in the *midst*, or *between* his *Regements*, as it happened *Tilly* to have in his *battell* of *Liepsich*. But I willingly forbear, that so I might demonstrate the *standing* of three *Brigades* together in order of *battell*, according to the *usuall* and *accustomed* manner of *Imbattelling* by that *invincible King of Sweden* of never dying memory; who placed them as in this ensuing *figure*. The *battell* of the following *brigade* being alwayes placed directly behind the *Intervall*, *Division*, or *space of ground* between the two *wings* of the former *brigades*.





This *paines* gentle Reader, have I taken for *thy good*; the which if it find a *kindly* and *courteous* Acceptance, shall be to me a *guerdion* or *satisfacti-  
on* sufficient for my *labor* and *patience*. As for the *envious*, who like the dog in the manger will neither eat himselfe nor willingly suffer them that would. It must be imputed to their *cinicall* dispositions: who *square* other mens *indeuours* according to the *crooked line* of their owne *conceits*. Condemning things *commendable* in others: but neither saying or doing any thing *considerable* themselves. Another sort there be, that would seeme to carry the *port* of *knowledge* about them, yet infected with so much *malignity*, that being *requested* of their *opinions*; they will answer with an *Italian shrug*, or some such like *mimick gesture*: thereby insinuating a kind of *doubtfulnes* of things amisse, when themselves are not able to *render a reason* of their *distaste*. I have been toucht with the venom'd teeth of a *third sort*. Who have rendred themselves so *irrationall* and *stupidly beastiall*; that their *tongues* serve them but as *instruments* to wound and goare the *Reputations* of men, then themselves *much more deserving*. But seeing that to *display* their *fol-  
lies*, were but to *soyle the purity* of my *subject*: I will leave them to the *amendment* of their *errors*. Desiring once more of the *courteous* (and well knowing *Readers*, that they will put a *faire* construction on mine, and the *Printers oversights*: by  
which

which they will not only *demonstrate* the goodnesse of their owne *dispositions*; but put a further *Obligation* upon him that will ever be ready to serve them.

*The Glory be to God.*

FINIS.







# ¶ The Table of Dignity for 100. MEN.

	230	250	270	255	235	240	260	265	245	225	
28	2	6	10	7	3	4	8	9	5	1	27
228	42	46	50	47	43	44	48	49	45	41	227
428	82	86	90	87	83	84	88	89	85	81	427
378	72	76	80	77	73	74	78	79	75	71	377
178	32	36	40	37	33	34	38	39	35	31	177
128	22	26	30	27	23	24	28	29	25	21	127
328	62	66	70	67	63	64	68	69	65	61	327
478	92	96	100	97	93	94	98	99	95	91	477
278	52	56	60	57	53	54	58	59	55	51	277
78	12	16	20	17	13	14	18	19	15	11	77
	240	260	280	265	245	250	270	275	255	235	

If you please to make an experiment, of the *uniformity* and proportion, that one *file* or *ranke* holdeth with another, and would first make try-  
all of a *file*, then *add the numbers of one file together*,  
(which done) *add the number together*, of the next  
*file in dignity*, into one summe : Then *subtract*,  
the

## Military Discipline, or

Files preced  
each other in  
dignity accor-  
ding to their  
places. Each  
man in the right  
hand file, pre-  
ceding him of  
the same place  
in the left hand  
file which makes  
the difference  
of number be-  
tween them. 6.  
at 6. deepe eight  
at 8. deep, &c.

\*The difference  
betwixt every  
next ranke of  
dignity, in the  
table of 36. is  
the same number

In the table of  
64. the differ-  
ence between  
the next rankes  
of dignity is 64.

In the table of  
100. the differ-  
ence is the like  
number of 100.  
&c.

the lesser number out of the greater, and you shall alwayes finde, that one file preceds the other, no more then there are particular places in a file: as six; in files of six deep: eight; in files of 8 deep, and ten, in files of 10 deep the which makes no disproportion, but are onely numbers of distinction.

Would you make an experiment, between the dignity of rank and ranke; then as before adde the simple numbers together of one rank, the which being found, adde the simple numbers together of the next ranke in dignity: The which in like manner being performed, subtract the lesser number out of the greater, and you shall finde the remainder alwayes to be the compleat number of the square body. \* As for example in the table of thirty six, adde the numbers of the first rank (or file-leaders) together; and you shall find by addition twenty one; adde the numbers of the second ranke in dignity (which are the bringers up) together, and you shall finde fifty seven. Then subtract the number of the first ranke from the second in dignity, and the remainder will be thirty six the just number of the whole square. And so in like manner is the number of difference, betweene every two next ranks of dignity in that Table. The other Tables in like nature, having the same difference, according to the number of the body: either of thirty six, sixty foure, or one hundred. But I doubt I shall be blamed, for tedious curiosity: therefore returne we to the demonstration of drawing files up into a body; for the which observe the following Table.



## The young Artillery Man.

Ere we proceede take notice, that I have drawne three tables of dignitie. The first of six deepe and six abreast; the second of eight deepe and eight abreast; the third of tenne deepe, and ten abreast: which will shew the particular dignities due to each man, in ranke and file, I have also added, three other square Tables the first of thirty six men, the second of sixty foure, the third one hundred. And in each Table, I have shewed every mans place of dignity, in file, and rank, as also in the joy-ned body, from the first and cheife to the last, and least in dignity, by figures of number, with an addition of their sommes together, to shew their uniformity, and proportion to each other.

### The places of Dignity of 10 in Ranke.

2	6	10	7	3	4	8	9	5	1
---	---	----	---	---	---	---	---	---	---

### The places of Dignity of 8 in Ranke.

2	6	7	3	4	8	5	1
---	---	---	---	---	---	---	---

### The places of Dignity of 6 in Ranke.

2	6	3	4	5	1
---	---	---	---	---	---

Rules of Dignity ought not to be regulated (by ill Customes, conceited Opinions, and false Grounds) but by truth and reason.

The places of Dignity of 6 in File

1
5
4
3
6
2

C. 2

The places of Dignity of 8 in File.

5
8
4
3
7
6
2

The places of Dignity of 10 in File. The

5
9
8
4
3
7
10
6
2
1

# THE TABLE OF DIGNITIE FOR 36 MEN.

	48	60	51	54	57	45	
11	2	6	3	4	5	1	10
83	26	30	27	28	29	25	82
65	20	24	21	22	23	19	64
47	14	18	15	16	17	13	46
101	32	36	33	34	35	31	100
29	8	12	9	10	11	7	28
	4	66	57	60	53	51	

## THE TABLE OF DIGNITIE FOR 64 MEN.

	120	136	140	124	128	144	132	116	
18	2	6	7	3	4	8	5	1	18
146	34	38	39	35	36	40	37	33	146
242	58	62	63	59	60	64	61	57	242
114	26	30	31	27	28	32	29	25	114
82	18	22	23	19	20	24	21	17	82
210	50	54	55	51	52	56	53	49	210
178	42	46	47	43	44	48	45	41	178
50	10	14	15	11	12	16	13	9	50
	120	136	140	124	128	144	132	116	



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